



Client Operation Manual

C1554M-A (4/05)

Contents

Introduction	9
Configuring Servers	10
User Groups	12
Logging In and Out	13
Logging In When the Client Is Not Already Running	13
Logging In When the Client Is Already Running	15
Logging Out	16
Shutting Down the Client	16
Workspaces	17
Opening a Workspace	17
Autogenerating a Workspace	18
Editing a Workspace	18
Appearance Tab	19
Size Tab	22
Position Tab	23
Content Tab	24
Details Tab	25
Saving a Workspace	25
Workspace Preferences	26
Setting Your Preferences	27
Maps	28
Loading Maps	28
Adjusting the Map Display	29
Zoom Buttons	29
Previous View Button	29
Predefined Views	29
Hotlinks	30
Labels	31
Icons	31
Devices	32
Device Icons	32
Device List	33
Switching a Device	33
Controlling VMX300(-E) Devices	34
Controlling a Pelco PTZ Camera	34
Pelco PTZ Gadget	35
Opening the Device Control Dialog Box	35
Pan, Tilt, Zoom, Iris, and Focus	35
Presets	37
Patterns	41
Sequences	45
Auxiliaries	45
On-Screen Display	46
Locking a Camera	47
Capturing Live Video	49
Controlling a PelcoNet Device	49
PelcoNet Device Controls	50
Gadgets Available When Viewing Video From a PelcoNet Device	50
Controlling a DX8000 Series DVR	52
Viewing Live Video	52
Working With Archived Video	52
Controlling a DX9000 Series DVR	54

Viewing Live Video	54
Working with Archived Video	55
Controlling an ASCII Switcher	62
ASCII Switcher Gadget	62
Opening the Switcher's Device Control Dialog Box	62
Date/Time Tab	62
On-Screen Display	63
Controlling an ASCII Camera	64
ASCII Camera Gadget	64
Opening the Camera's Device Control Dialog Box	64
Pan, Tilt, Zoom, Iris, and Focus	64
Presets	66
Patterns	70
Sequences	74
Auxiliaries	74
On-Screen Display	75
Locking a Camera	75
Controlling a KBD300A Keyboard	77
Controlling a CM9760-REL Relay Output Unit	79
Opening a CM9760-REL Relay Unit's Device Control Dialog Box	79
How to Control a Relay Unit	80
Controlling a Serial Output Device	81
Opening a Serial Output Device's Device Control Dialog Box	81
Controlling an IP Device Status Monitor	83
Accessing IP Device Controls Through an Embedded Web Server	83
Monitoring an Access Control Device	84
Monitoring Access Control Points	84
Port Buffer Tab	85
Gadgets	86
Video for Windows Gadget	87
Quad Video Display Gadget	88
Configure Quad Video Display Properties	88
Custom Windows	90
Viewing Live Video	92
Capturing Live Video	93
Controlling a Camera	93
PTZ Controls	93
Viewing Archived Video	95
Locating Archived Video	95
Controlling an Archive Device	99
Cursor Mode	99
Viewing Maps	100
Viewing an Internet Browser	100
Viewing a Remote PC (Workstation)	101
Scripts	103
Running a Script	103
Pausing a Script	103
Stopping a Single Script	104
Stopping All Scripts	104
Event Picker	105
Building a Date/Time	106
Zooming to a Time Unit	108
Session Manager	109
Session View	110
Current Session Tree	111
Activities List	111

Archive View	112
Browsing Archived Alarms and Events	113
Filtering Archived Alarms and Events	113
Schedules	118
How Schedules Work	118
When a Schedule Executes	118
Responding to a Schedule	118
Alarms and Events	119
How Alarms and Events Work	119
When an Alarm or Event is Triggered	119
Replaying an Alarm or Event	120
Acknowledging an Alarm or Event	120
When an Alarm or Event Becomes Complete	120
Server Status	121
Remote Desktop Servers	122
Starting a Remote Desktop Server	122
Setting Remote Desktop Server Options	123
Shutting Down a Remote Desktop Server	123
Appendix: Adjusting the Display	124
Adjusting Dockable Windows	124
Adjusting the Size of a Docked Window	124
Docking a Window in a Different Position	124
Closing a Window	124
Resizing a Window	124
Repositioning a Window	124

List of Illustrations

1	Login Dialog Box	10
2	Configure Servers Dialog Box	10
3	Add Server Dialog Box	11
4	Edit Server Dialog Box	11
5	Client Login Dialog Box	13
6	Select Group Dialog Box	14
7	Workspace Not Found Message	14
8	Client Login Dialog Box	15
9	Select Group Dialog Box	15
10	Workspace Not Found Message	16
11	Edit Workspace Dialog Box	19
12	Edit Workspace Dialog Box - Appearance Tab	19
13	Custom Window - Windows Caption and Border Setting	20
14	Custom Window - No Caption or Border Setting	20
15	Custom Window - Custom and Border Setting	21
16	Edit Window Title Dialog Box	21
17	Edit Workspace Dialog Box - Size Tab	22
18	Edit Workspace Dialog Box - Position Tab	23
19	Edit Workspace Dialog Box - Content Tab	24
20	Edit Workspace Dialog Box - Details Tab	25
21	Workspace Decision Process	26
22	User Preferences Dialog Box	27
23	Loading a Map	28
24	Loading a Predefined View	30
25	Viewing a Hotlink	30
26	Viewing a Label	31
27	Viewing a Device Icon	32
28	Device Icon - Hollow Outline	32
29	Device List	33
30	PTZ Gadget	35
31	Device Control Dialog Box - Control Tab	36
32	Device Control Dialog Box - Presets Tab	37
33	Add New Preset Dialog Box	39
34	Edit Preset Properties Dialog Box	39
35	Edit Home Preset Dialog Box	40
36	Device Control Dialog Box - Patterns Tab	41
37	Record New Pattern Dialog Box	42
38	Record New Pattern - Stop Recording	43
39	Edit Pattern Properties Dialog Box	43
40	Edit Pattern Properties - Stop Recording	43
41	Edit Default Pattern Dialog Box	44
42	Device Control Dialog Box - Auxiliaries Tab	45
43	Device Control Dialog Box - On-Screen Display Tab (left) and Sample On-Screen Display (right)	46
44	Lock Button Locations	48
45	Selecting a PelcoNet Gadget	50
46	PelcoNet MPEG Gadget	50
47	\PelcoNet Canvas Gadget for Live Video	51
48	PelcoNet Canvas Gadget for Archived Video	51
49	DX8000 Gadget for Live Video	52
50	DX8000 Gadget for Archived Video	53
51	Selecting Live Video	54
52	DX9000 Gadget - Live Video	55
53	Selecting Archived Video	55
54	Locating Archived Video	56
55	Viewing Archived Video	57
56	Using an Alarm or Event to Locate Archived Video	58
57	Using an Alarm or Event to Locate Archived Video	59
58	DX9000 Gadget - Archived Video	60
59	Selecting Cursor Mode	61

60	ASCII Switcher Gadget	62
61	Device Control Dialog Box - Date\Time Tab	62
62	Device Control Dialog Box - On-Screen Display Tab	63
63	Sample On-Screen Display	63
64	ASCII Camera Gadget	64
65	Device Control Dialog Box - Control Tab	65
66	Device Control Dialog Box - Presets Tab	66
67	Add New Preset Dialog Box - Presets Tab	67
68	Edit Preset Properties Dialog Box	68
69	Edit Home Preset Dialog Box	69
70	Device Control Dialog Box - Patterns Tab	70
71	Record New Pattern Dialog Box	71
72	Record New Pattern - Stop Recording	71
73	Edit Pattern Properties Dialog Box	72
74	Edit Pattern Properties - Stop Recording	72
75	Edit Default Pattern Dialog Box	73
76	Device Control Dialog Box - Auxiliaries Tab	74
77	Device Control Dialog Box - On-Screen Display Tab (left) and Sample On-Screen Display (right)	75
78	Lock Button Locations	76
79	Keyboard Functions	77
80	Relay Unit Device Icon	79
81	CM9760-REL Device Control Dialog Box	79
82	Relay Point 1 Disabled	80
83	Serial Output Device Icon	81
84	Device Control Dialog Box - Text Tab	81
85	Device Control Dialog Box – Custom Buttons Tab	82
86	Using a Script to Control a Serial Output Device	83
87	IP Device Status Monitor Icon	83
88	Access Control Device Icon	84
89	Monitoring Access Control Points	84
90	Port Buffer Tab	85
91	Sample Camera Gadget	86
92	Gadgets Drop-Down List	86
93	Video for Windows Gadget	87
94	Quad Video Display Gadget	88
95	Quad Video Display Properties Dialog Box: General Tab	88
96	Quad Video Display Properties Dialog Box: Color Key Tab	89
97	Quad Video Display Properties Dialog Box: Advanced Tab	89
98	Custom Window Title Bar	90
99	Custom Window Pop-up Menu	91
100	Viewing Video in a Custom Window	93
101	Selecting a Date and Time	95
102	Viewing Archived Video	96
103	Selecting a Date and Time in the Session Manager	97
104	Viewing Video from an Archived Alarm or Event	98
105	Selecting Cursor Mode	99
106	Loading a Map into a Custom Window	100
107	Viewing an Internet Page	101
108	Remote Desktop Log On Dialog Box	102
109	Viewing a Remote PC	102
110	Running a Script	103
111	Stopping a Script	104
112	Event Picker	105
113	Session Manager	105
114	Sample Event Picker Date and Time Selection	105
115	Using the Event Picker in Session Manager Archive View	106
116	Sample Event Picker Date and Time Selection	106
117	Clearing the Event Picker	107
118	Selecting the Year	107
119	Selecting the Month	107
120	Sample Event Picker Date and Time	107
121	Event Picker Pop-up Menu	108

122	Session Manager	109
123	Session Manager Tool Bar	109
124	Session Manager	110
125	Current Session Tree	111
126	Session Manager - Activities List	111
127	Session Manager - Archive View	112
128	Sample Archived Event - Details	113
129	Browsing Archived Alarms and Events	113
130	Filtering Archived Alarms and Events	114
131	Filter Dialog Box - Servers Tab	114
132	Filter Dialog Box - Categories Tab	115
133	Filter Dialog Box - Acknowledged Tab	115
134	Filter Dialog Box - Source Device Tab	116
135	Filter Dialog Box - Advanced Tab	116
136	Server Status window	121
137	Configure Remote Desktop Server Dialog Box	122
138	Remote Desktop Server Dialog Box	123

List of Tables

A	Window Border Options	20
B	Methods of Switching Devices	34
C	Mouse Controls	36
D	Keyboard Controls	37
E	Different Lock Colors	48
F	Different States of the Lock Button	49
G	Mouse Controls	65
H	Keyboard Controls	66
I	Different States of the Lock Button	77
J	KBD300A Button Functions	78
K	Custom Window Pop-up Menu Options	92
L	Mouse Controls	94
M	Keyboard Controls	94
N	Event Picker Pop-up Menu Options	108
O	Session Manager Buttons	110

Introduction

Welcome to the VMX300(-E) video management system, designed to provide video and surveillance applications in a highly customizable and user-friendly environment.

VMX300(-E) supports client-to-server, multiple clients-to-server, client-to-multiple servers, and server-to-server control and monitoring of CCTV equipment via both analog and IP connections. VMX300(-E)'s strength lies in its ability to control virtually any number and combination of analog and IP devices from different manufacturers with point and click simplicity. VMX300(-E) seamlessly integrates cameras, monitors, switchers, VCRs, and a host of other types of devices.

This manual describes the client application used by VMX300(-E) operators. The sections on workspaces, configuring servers, and remote desktop servers will also be of interest to system administrators.

VMX300(-E) supports a wide variety of equipment. For information on a specific device in your system, refer to the *Devices* section.

Configuring Servers

NOTE: Typically, the system administrator or other system support professional configures the servers when the VMX300(-E) client is first installed on a workstation. Do not attempt to configure servers without instruction from the system administrator.

The first time the VMX300(-E) client is run on a workstation, you must specify which VMX300(-E) server(s) to connect to from that client. Typically, the system administrator configures servers for a client when the client is installed on the workstation. Once specified, a client will connect to the configured servers by default, saving you from specifying a server every time you log in from that workstation. If you ever need to connect to different servers than the currently configured ones, you can configure different ones when you log in.

NOTE: Server configuration applies to a client. The same server configuration will be used for every user who logs in from that client.

In order for you to be able to connect to a particular server, the system administrator must set up the server itself to allow it. The system administrator should instruct you in which servers you can connect to.

Below is a typical approach to configuring servers.

1. Discover All servers to build a master list to work from.
2. Select a servservers you do not want to connect to.

Configuring servers to connect to is done within the login procedure. Start the VMX300(-E) client as described in *Logging In and Out - Logging In When the Client Is Not Already Running* and click Servers.



Figure 1. Login Dialog Box

The Configure Servers dialog box opens. The Configure Servers dialog box lists all currently configured servers.

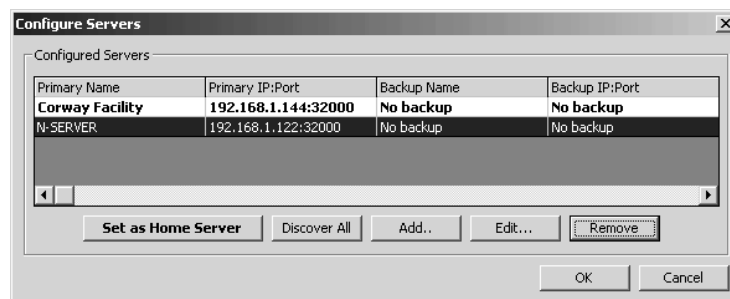


Figure 2. Configure Servers Dialog Box

Configure servers as follows:

1. **Discover all:** To locate all VMX300(-E) servers that are visible over the network from your client, click Discover All. The system will warn you that discovering all servers clears any servers that are currently configured. If you do not want to clear the currently configured servers, click No and use the Add option instead of Discover All. If you want to proceed with discovering all servers, click Yes. The list of currently configured servers is cleared and all the servers that could be located appear in the Configured Servers list.

Due to network configuration, Discover All might not locate all the VMX300(-E) servers on the network. If you know the IP address and port number of a server that was not located automatically, you can add it to the Configured Servers list using the Add option.

If the Discover All option finds only one server, that server will automatically be made your home server. The home server displays in bold face in the Configured Servers list.

2. **Add:** The Add option adds servers to the Configured Servers list without clearing the existing list. Use the Add option instead of Discover All if you want to add a server without clearing the Configured Servers list, or if you know the server's IP address and the server does not appear using Discover All.

To add a server to the Configured Servers list, click Add. The Add Server dialog box appears.

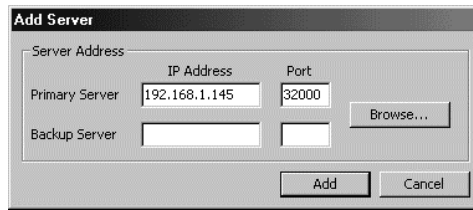


Figure 3. Add Server Dialog Box

If you know the server's IP address and port, type them in the Primary Server area. If the primary server has a backup server that you want the client to connect to as well, type the backup server's IP address and port in the Backup Server area. Your selections of primary and backup servers must coincide with the set up performed by your system administrator on the servers themselves.

Alternatively, click Browse. Select the desired server from the list and click OK, or double-click the server.

Click Add. The Add Server dialog box closes and the server you added appears in the Configured Servers list.

3. **Edit:** To change the IP address or port of a server in your configured servers list, select the server and click Edit. The Edit Server dialog box opens.

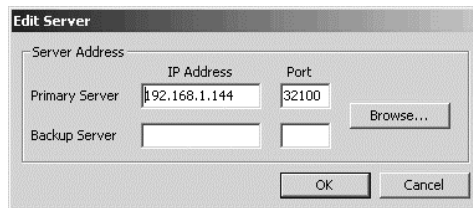


Figure 4. Edit Server Dialog Box

Change the IP address or port number of the server or its backup as desired. Your selections of primary and backup servers must coincide with the set up performed by your system administrator on the servers themselves.

Alternatively, click Browse. Select the desired server from the list and click OK, or double-click the server.

Click OK. The Edit Server dialog box closes and your changes appear in the Configured Servers list.

4. **Set as home server:** Select the server you want to use as your home server in the Configured Servers list and click Set as Home Server. You must be connected to your home server to be able to open, edit, or save workspaces. The home server is saved. It appears in bold face in the Configured Servers list.
5. **Remove:** Remove every server you do not want to log in to from the Configured Servers list. To remove a server, select the server in the Configured Servers list and click Remove. The server disappears from the Configured Servers list.
6. Click OK. The Configure Servers dialog box closes. If no home server is set, you are given the opportunity to set one before closing the dialog box.

NOTE: Whenever you log in, you are logged in to every server in your Configured Servers list, provided your system administrator has set up the servers themselves to allow it. If there are servers in the list that you do not want to log in to, make sure you remove them from the list.

User Groups

When the system administrator sets up a user account for you, you are assigned to one or more user groups. Each user group embodies a set of privileges the members of the group have. These privileges delineate which parts of the VMX300(-E) system members have access to and what events members are notified of.

Your system administrator should instruct you in which user groups you belong to and what privileges you have. You can only exercise the privileges of one group at a time. If you belong to more than one group, you must select one of the groups you belong to when you log in. For the duration of that session, your privileges are limited to those granted by the group you selected when you logged in. To exercise the privileges of another, different group that you belong to, you must log out and log in again, this time selecting the other group.

If you are connecting to more than one server, you can select a different user group to log in under for each server you connect to.

Default user group: To save yourself the trouble of selecting a user group every time you log in, you can set a user group to log in to by default. Thereafter, the client will log you in automatically under the default group, providing you are connecting to the same server from the same client as when you set the default. You can later override the default.

If you are connecting to more than one server, you can set a different default user group for each server you are connecting to.

Refer to *Logging In and Out* for instructions on setting and clearing the default user group.

Logging In and Out

Before you log in to the VMX300(-E) client, you need to know the following information:

- Your user name
- Your password
- Which user groups you belong to

The VMX300(-E) system administrator has this information. If you belong to more than one group, you should be instructed in what privileges each group grants. For more information on user groups, refer to *User Groups*.

VMX300(-E) provides two ways for you to log in to the client:


- Start the client and log in
- When the client is already running, log in as a new user

Likewise, there are two ways for you to log out of the client:

- Shut down the client
- With the client running, let a new user log in using the Log In As New User option, which logs you out

NOTES:

- You are not logged out until someone else logs in or the client is shut down.
- If you want to connect to a particular server from more than one client at one time, log in using different user accounts.

 **TIP:** If you belong to more than one user group and you want to switch the group you are logged in under, use the Log In As New User option to log you out of the one group and into the other.

LOGGING IN WHEN THE CLIENT IS NOT ALREADY RUNNING

To start the VMX300(-E) client and log in:

1. Select the VMX300(-E) client from the Windows Start menu, or double-click the VMX300(-E) client icon on the Windows desktop, if there is one.

If this is the first time you are launching the client, the Corrupt or Missing Database message appears because VMX300(-E) must create a new database the first time you use it. Click Create.

If this is not the first time you are launching the client, and the Corrupt or Missing Database message appears, then the client database is corrupted or missing. If this is the case your system administrator needs to restore a backup or create a new client database.

Once a valid database is in place, the Client Login dialog box opens.



Figure 5. Client Login Dialog Box

2. **User name:** Type your user name. User names are not case sensitive. For example, **Operator** and **OPERATOR** are the same as **operator**.
3. **Password:** Type your password. Passwords are case sensitive. For example, **Op4days** and **OP4DAYS** are different than **op4days**.
4. **Servers:** If this is the first time you have logged in, or if you want to log in to a server other than your usual server, click Servers. For more information on selecting a server, refer to *Configuring Servers*.

5. If you belong to only one user group, click OK.

If you belong to more than one user group, VMX300(-E) needs to know which user group you want to log in under. You can either log in under your default user group, if you have one set, or you can select the user group to log in under.

- a. **Log in under default:** To log in under your default user group, click OK.
- b. **Override default:** To override your default user group, select Clear Remembered Group(s) and click OK. TIP: If you do not know if you have a default set, you can find out by selecting Clear Remembered Group(s).

The Select Group dialog box opens.



Figure 6. Select Group Dialog Box

Select group: Select the user group you want to log in under from the drop-down menu. If you are connecting to more than one server, the user group you select here applies only to the server specified in the dialog box.

Set default: If you want to set the selected group as the default for the specified server, select “Always log in to this server as this group from this location.”

Click OK. If you are connecting to more than one server, you will be prompted to select a user group for each server on which you belong to more than one user group. You can also set a default for each server, if desired.

6. If no startup workspace is defined, you are asked whether you want the system to build a workspace for you automatically. Click Yes to build a workspace, or No to work without a workspace.

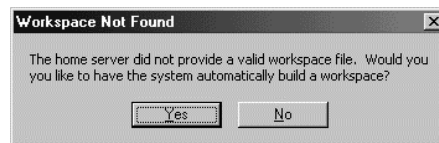


Figure 7. Workspace Not Found Message

The VMX300(-E) Main window will open after several seconds and you will be connected to all the configured servers that are available.

NOTES:

- The default group only applies when you connect to the same server from the same client as when you set the default.
- VMX300(-E) can only connect you to servers that are running and available. If a server that was not available when you logged in becomes available during your session, you will be logged in automatically.

LOGGING IN WHEN THE CLIENT IS ALREADY RUNNING

If the client is already running on the workstation you want to log in from, you can log in without having to shut down and re-start the client. The File menu's Log In As New User option allows you to connect to the same server(s) as the previous user. The previous user is logged out when you log in.

NOTE: The Log In As New User option logs you in to the same server(s) as the previous user. To log in to different servers, you must shut down the client, then start it as described in *Logging In When the Client Is Not Already Running*.

1. Click File > Log In As New User, or click the Main window and press Ctrl-U. If the current workspace has changed, you are asked whether you want to save the changes. Click Yes to save the changes, or No to discard them. The Client Login dialog box opens.



Figure 8. Client Login Dialog Box

2. **User name:** Type your user name. User names are not case sensitive. For example, **Operator** and **OPERATOR** are the same as **operator**.
3. **Password:** Type your password. Passwords are case sensitive. For example, **Op4days** and **OP4DAYS** are different than **op4days**.
4. If you belong to only one user group, click OK.

If you belong to more than one user group, VMX300(-E) needs to know which user group you want to log in under. You can either log in under your default user group, if you have one set, or you can select the user group to log in under.

- a. **Log in under default:** To log in under your default user group, click OK.
- b. **Override default:** To override your default user group, select Clear Remembered Group(s) and click OK. TIP: If you do not know if you have a default set, you can find out by selecting Clear Remembered Group(s).

The Select Group dialog box opens.



Figure 9. Select Group Dialog Box

Select group: Select the user group you want to log in under from the drop-down menu. If you are connecting to more than one server, the user group you select here applies only to the server specified in the dialog box.

Set default: If you want to set the selected group as the default for the specified server, select "Always log in to this server as this group from this location."

Click OK. If you are connecting to more than one server, you are prompted to select a user group for each server on which you belong to more than one user group. You can also set a default for each server, if desired.

5. If no startup workspace is defined, you are asked whether you want the system to build a workspace for you automatically. Click Yes to build a workspace, or No to work without a workspace.

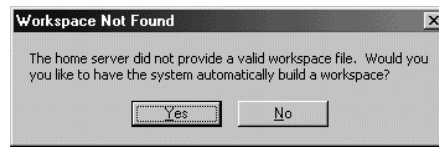


Figure 10. Workspace Not Found Message

The VMX300(-E) Main window will open after several seconds and you will be connected to all the configured servers that are available.

NOTES:

- The default group only applies when you connect to the same server from the same client as when you set the default.
- VMX300(-E) can only connect you to servers that are running and available. If a server that was not available when you logged in becomes available during your session, you will be logged in automatically.
- The previous user is not logged out until you have completed logging in. If you cancel out of the login procedure, the previous user will still be logged in.



TIP: If you belong to more than one user group and you want to switch the group you are logged in under, use the Log In As New User option to log you out of the one group and into the other.

LOGGING OUT

There are two ways for you to log out of the client:

- Shut down the client. Refer to *Shutting Down the Client* for instructions.
- With the client running, let a new user log in using the Log In As New User option, which logs you out. Refer to *Logging In When the Client Is Already Running* for instructions.

SHUTTING DOWN THE CLIENT

To shut down the VMX300(-E) client:

Click File > Exit or click the X in the upper right corner of the Main window.

If the workspace has changed since you last saved it, you are given the opportunity to save before exiting. Select Yes to save the workspace, or No to discard your changes. The client logs you out and shuts down.

Note that the monitor screen may appear black for about five seconds, and then the Windows desktop appears. This is part of the normal shutting down process.

Workspaces


Workspaces control the appearance of the VMX300(-E) client. In particular, they control which windows are displayed and their size, position, and content.

You can set a default workspace to open when you log in, or you can explicitly open a workspace of your choice once you are logged in. Refer to *Workspace Preferences* and *Setting Your Preferences* for information on setting a default workspace. Refer to *Opening a Workspace* for instructions on opening a workspace after you are logged in. The name of the workspace that is currently open appears in the Main window title bar.

The workspace affects the appearance of most windows in the client, including three predefined VMX300(-E) windows, as well as any custom windows set up by your system administrator. The following predefined windows are affected by the workspace:

- VMX300(-E) Main window, which includes the map viewport
- Session Manager window
- Device List window

Once logged in, you can change the appearance of the display either by using standard Windows techniques for resizing and repositioning windows, or by editing the workspace. Refer to the *Appendix* for information on standard Windows techniques for adjusting the display. Refer to *Editing a Workspace* for information on editing workspaces.

 **TIP:** A workspace is like a snapshot of the client user interface. The easiest way to create the appearance you want for the client is to adjust the display on-screen, then save the workspace. Whenever you open that workspace, the user interface will look just like it did when you saved the workspace.

A workspace only works for the monitor configuration the workspace was created on. To create a workspace on one workstation that you can open on other workstations, the workstations must have the same number of monitors, primary monitor configuration, and resolution.

NOTES:

- To access workspaces, you must be connected to your home server. If you are not logged in to your home server, the workspace options in the File menu are not available, regardless of whether you have permission to work with workspaces. For information on setting a home server, refer to *Configuring Servers*.
- Workspaces are defined for a particular user on a particular client. If you log in to different clients on a regular basis and you want a default workspace to open whenever you log in, you must set a default workspace for each client.


OPENING A WORKSPACE

Opening a workspace sets the appearance of the client to the appearance specified in the workspace.

Access privileges: To open a workspace, you must belong to, and log in under, a user group that allows you to open workspaces. You must also be logged in to your home server. If the Open Workspace option of the File menu is unavailable, then either you do not have permission to open workspaces, or you are not logged in to your home server. Refer to *User Groups* for information on access privileges. Refer to *Configuring Servers* for instructions on setting a home server.

To open a workspace:

1. Click File > Open Workspace, or click the Main window and then press Ctrl-O. The Open Workspace dialog box opens.
2. Select the workspace you want to open from the list, or browse to find the desired workspace file.
3. Click OK. If you have adjusted the display, you are asked whether you want to save the changes to the previous workspace. Click Yes to save the changes or No to discard them. The previous workspace closes and the selected workspace opens.

 **TIP:** If the workspace you want to open has recently been opened in that client, its name appears in the File menu, above the Exit option. Open the workspace by clicking its name.

NOTE: You cannot open a workspace that was created on a system with a different monitor configuration. If the number of monitors, the primary monitor, or the monitor's resolution differ, the workspace will not open.

AUTOGENERATING A WORKSPACE

Access privileges: To autogenerate a workspace, you must belong to, and log in under, a user group that allows you to open and edit workspaces. You must also be logged in to your home server. If the Open Workspace and/or Edit Workspaces option of the File menu is unavailable, then either you do not have permission to open or edit workspaces, or you are not logged in to your home server. Refer to *User Groups* for information on access privileges. Refer to *Configuring Servers* for instructions on setting a home server.

Autogenerating a workspace automatically builds a workspace correctly for one-monitor, two-monitor, and three-monitor systems:

- **One monitor:** Displays the Device List and Session Manager. Aligns custom windows in the map viewport, obscuring part or all of the map.
- **Two monitors:** Displays the Device List, Session Manager, and map viewport on the left monitor. Aligns custom windows on the right monitor.
- **Three monitors:** Displays the Device List and map viewport on the left monitor. Displays the Session Manager full-screen on the center monitor. Aligns custom windows on the right monitor.

When you autogenerate a workspace, you select the number of custom windows you want opened: 1, 4, 9, or 16. The number of custom windows that actually open depends on how many windows you have access to. For example, suppose you have a total of 5 custom windows:

- **Autogenerate 1 window:** Builds a workspace with one custom window open.
- **Autogenerate 4 windows:** Builds a workspace with four custom windows open.
- **Autogenerate 9 windows:** Builds a workspace with all five custom windows open. Some of the space for custom windows is unused.
- **Autogenerate 16 windows:** Builds a workspace with all five custom windows open. Some of the space for custom windows is unused.


If you autogenerate a workspace when a custom window's position is set to Fixed Position, VMX300(-E) automatically changes the setting to Moveable.

NOTE: Autogenerating a workspace modifies the current workspace. To preserve your current workspace, save the autogenerated workspace under a different file name.

To autogenerate a workspace, click File > Autogenerate Workspace and select the desired number of windows from the submenu. The workspace is autogenerated.

EDITING A WORKSPACE

To edit a workspace, you must belong to, and log in under, a user group that allows you to edit workspaces. You must also be logged in to your home server. If the Edit Workspaces option of the File menu is unavailable, then either you do not have permission to edit workspaces, or you are not logged in to your home server. Refer to *User Groups* for information on access privileges. Refer to *Configuring Servers* for instructions on setting a home server.

 **TIP:** The easiest way to create the appearance you want for the client is to adjust the display on-screen using standard Windows techniques to resize and reposition windows, then save the workspace. Use the Edit Workspace option to enable the type of adjustment you want to make, but not to make the actual adjustment. For example, you might make a window sizeable through the Edit Workspace option, but do the actual resizing on-screen using standard Windows techniques.

NOTE: Settings in the Edit Workspace dialog box come into effect immediately. This enables you to see the effect of your selections without having to close the dialog box. However, you must explicitly save the workspace to make your changes permanent. Refer to *Saving a Workspace* for instructions.

To edit a workspace:

1. If you want to edit a particular workspace file, open the workspace you want to edit, as described in *Opening a Workspace*. If you are creating a new workspace, follow the instructions given here, then save the workspace when you have finished editing it. Refer to *Saving a Workspace* for instructions.

2. Click File > Edit Workspace, or click the Main window and press Ctrl-E. The Edit Workspace dialog box opens. The Edit Workspace dialog box has five tabs, three of which control appearance: Appearance, Size, and Position. The Content tab controls window content. The Details tab provides troubleshooting information.

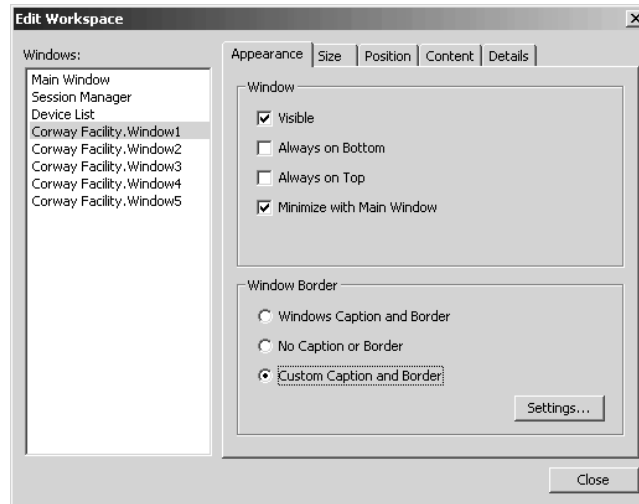


Figure 11. Edit Workspace Dialog Box

3. **Windows:** The Windows list at the left of the Edit Workspace dialog box lists all the windows whose appearance is affected by a workspace. This includes the VMX300(-E) Main window, Session Manager window, and Device List window, as well as any custom windows the system administrator has defined on the server.

Select the window whose appearance you want to adjust by clicking the window's name in the Windows list, or by clicking the window itself. All the tabs in the Edit Workspaces dialog box display the settings for the selected window.

NOTE: The values of the settings you see on any tab in the Edit Workspace dialog box are for the window that is selected in the Windows list. To adjust the workspace settings for a window, you must first select the window in the Windows list and select Visible on the Appearance tab.

TIP: You can adjust the appearance of more than one window at a time by selecting multiple windows in the Windows list. To select nonconsecutive windows, hold the Ctrl key down while selecting with the mouse. To select consecutive windows, select the first window, hold the Shift key down, and select the last window.

APPEARANCE TAB

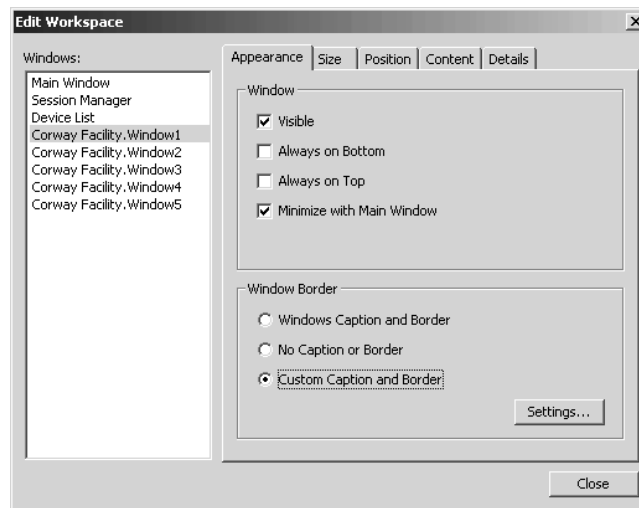


Figure 12. Edit Workspace Dialog Box - Appearance Tab

1. **Window:** With the desired window(s) selected in the Windows list:

- a. **Visible:** Select Visible to open the window. Clear Visible to close the window. A window that has Visible selected automatically opens when the workspace opens.

The Main window is always visible.

To adjust the appearance of a window through the Edit Workspace dialog box, the window must be selected in the Windows list and Visible must be selected. When Visible is not selected, the settings on the tabs are not available.

- b. **Always on bottom:** This option applies to custom windows only. Select Always on Bottom to have the selected window display underneath other custom windows that overlap it.
- c. **Always on top:** This option applies to custom windows only. Select Always on Top to have the selected window display on top of other custom windows that it overlaps.
- d. **Minimize with main window:** This option applies to custom windows only. Select Minimize with Main Window to have the selected window minimize whenever you minimize the Main window. Clear Minimize with Main Window to have the selected window remain at its current size when you minimize the Main window.

2. **Window border:** The Window Border settings apply to custom windows only. The differences between the different types of borders are summarized in Table A.

Table A. Window Border Options

OPTION	OPTION LOCATION	WINDOWS CAPTION AND BORDER	NO CAPTION AND BORDER	CUSTOM CAPTION AND BORDER
Title bar	Top of window	Y	N	Y
Title bar	Bottom of window	N	N	Y
Maximize and Close buttons	Title bar	Y	N	N
User-defined caption	Title bar	N	N	Y

- a. **Windows caption and border:** Select Windows Caption and Border to display the selected custom window with a standard Windows title bar. If the Size tab's Sizeable setting is selected for the window, the window's border will allow on-screen resizing.

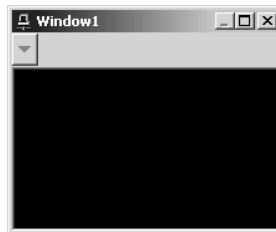


Figure 13. Custom Window - Windows Caption and Border Setting

- b. **No caption or border:** Select No Caption or Border to display the selected custom window with no title bar. If the Size tab's Sizeable setting is selected for the window, the window's border will allow on-screen resizing.

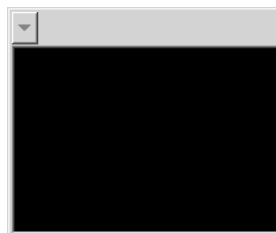


Figure 14. Custom Window - No Caption or Border Setting

- c. **Custom caption and border:** Select Custom Caption and Border to display the window with a caption and border of your choosing.

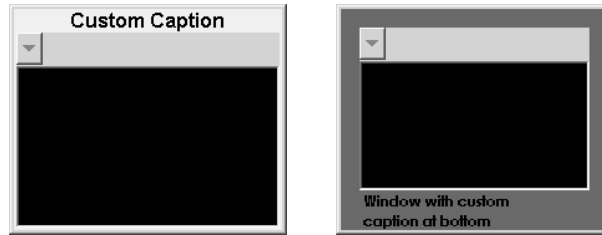


Figure 15. Custom Window - Custom and Border Setting

3. Click Settings to design the border. The Edit Window Title dialog box opens.

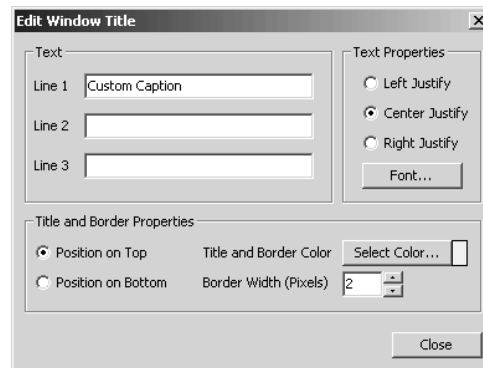


Figure 16. Edit Window Title Dialog Box

- a. **Text:** Type up to three lines of text for the window caption. The caption appears in the window's title bar. Each line of text can be at most 50 characters long and can include any letter, digit or special character.
- b. **Text properties:** Select the justification you want for the window caption. All the lines of text will be justified the same. Click Font to select the font for the caption, and to select display attributes like bold face, italics, and text color.
- c. **Title and border properties:** To have the title bar at the top of the window, select Position on Top. To have the title bar at the bottom of the window, select Position on Bottom. Click Select Color to select a fill color for the border and title bar. Increase or decrease the width of the border by increasing or decreasing the Border Width (Pixels) setting.
- d. Click Close. The Edit Window Title dialog box closes.

SIZE TAB

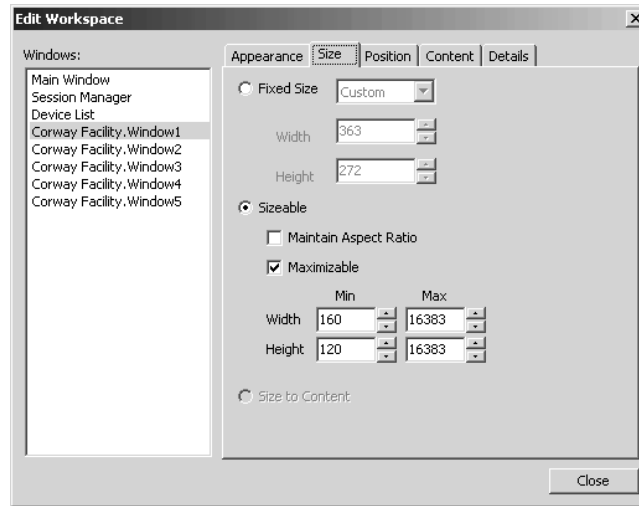


Figure 17. Edit Workspace Dialog Box - Size Tab

With the desired window(s) selected in the Windows list and with Visible selected on the Appearance tab:

1. **Fixed size:** Select Fixed Size if you want the window's size fixed at a particular size. The smallest allowable size is 160 x 120 pixels.

Specify a custom size in pixels by entering the dimensions in the Width and Height boxes. Alternatively, select a predefined size that is a fraction of the monitor size from the drop-down menu.

Selecting a predefined size creates an implicit grid that you can snap the selected window to using the Snap to Grid options of the Position tab. Refer to *Position Tab* for instructions on snapping a window to the grid.

If you try to select a predefined size that makes the window smaller than the minimum size, VMX300(-E) will automatically set the size to Custom 160 x 120.

2. **Sizeable:** Select Sizeable if you want to be able to resize the window by dragging its border.
 - a. **Maintain aspect ratio:** Select Maintain Aspect Ratio if you want the window proportions to remain constant when you resize it.
 - b. **Maximizable:** Select Maximizable if you want to be able to maximize the window.

To maximize a window, click the window, press Alt-Space Bar, and select Maximize from the drop-down menu. Windows of type Windows Caption and Border can also be maximized using the Maximize button in the title bar, or by right-clicking the title bar and selecting Maximize from the drop-down menu.

If you clear Maximizable, neither the Maximize option in the drop-down menu nor the Maximize button will be available.

- c. **Minimum and maximum dimensions:** In the Min and Max boxes, specify the minimum and maximum size the window can be resized to, in pixels.
3. **Size to content:** This field is reserved for future development.

POSITION TAB

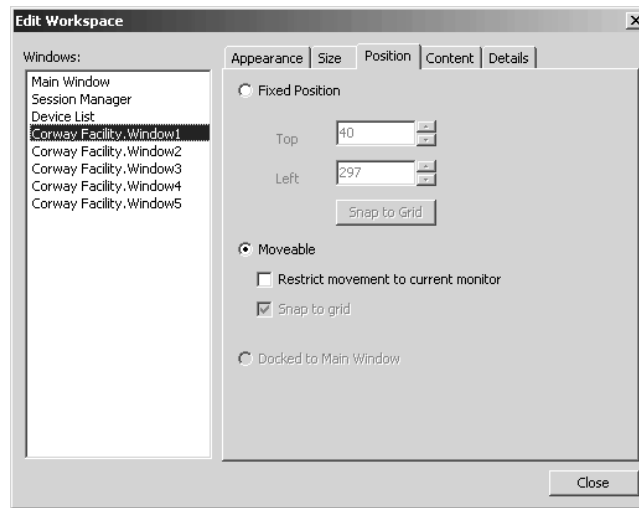


Figure 18. Edit Workspace Dialog Box - Position Tab

With the desired window(s) selected in the Windows list and with Visible selected on the Appearance tab:

1. **Fixed position:** Select Fixed Position to lock the selected window in a particular position.

Top, left: Specify a custom position by entering the position in the Top and Left boxes. Position [0,0] is the top left corner of the monitor screen that the top left corner of the window is displayed on. The Top setting measures pixels down from the top of the screen to the top edge of the window. The Left setting measures pixels in from the left of the screen that the window's left edge is displayed on, to the left edge of the window.

The value for Left can be negative, which is useful if you the workstation has more than one monitor. For example, if you have a two-monitor system and the window is open on the right monitor, you can give the window a fixed position on the left monitor by entering a negative value for Left.

Snap to grid: Instead of specifying a custom position, click Snap to Grid repeatedly to jump the window through the implicit grid points created by selecting a predefined fixed size. Snap to Grid is only available for windows with a predefined fixed size set on the Size tab. Refer to *Size Tab* for instructions on selecting a predefined fixed size.

Snap to Grid only works within the current monitor. To snap a window in a different monitor, first move the window to the desired monitor, then snap it.

If you autogenerate a workspace when a custom window's position is set to Fixed Position, VMX300(-E) will automatically change the setting to Moveable.

2. **Moveable:** Select Moveable if you want to be able to drag the selected window about freely on the monitor.
 - a. **Restrict movement:** To restrict the window from being moved to another monitor in a multi-monitor system, select Restrict movement to current monitor.
 - b. **Snap to grid:** Select Snap to grid to have the window snap to the implicit grid points created by selecting a predefined fixed size. Snap to Grid is only available for windows with a predefined fixed size set on the Size tab. Refer to *Size Tab* for instructions on selecting a predefined fixed size.
 - c. **Docked to main window:** Select Docked to Main Window to dock the selected window to the Main window. Only the Device List window and Session Manager window can be docked.

CONTENT TAB

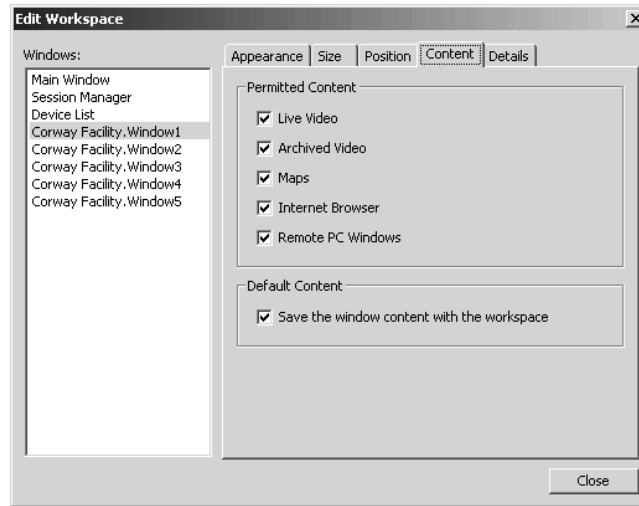


Figure 19. Edit Workspace Dialog Box - Content Tab

With the desired window(s) selected in the Windows list and with Visible selected on the Appearance tab:

1. **Permitted content:** The Permitted Content settings are available for custom windows only.

Select the types of content that you want to be able to display in the selected window(s). For example, if you allow Live Video in a particular window, but disallow all other types of content, then that window can only be used to view live video.

The following are the different types of content:

- Live video
- Archived video
- Maps
- Internet browser
- Remote PC windows

Refer to *Custom Windows* for information on how you view the different types of content.

Your system administrator specifies the types of content each user group can view. To allow or disallow a particular type of content, you must belong to, and be logged in under, a user group that provides access to that type of content. For example, if you are logged in under a user group that does not permit you to load maps in custom windows, then you will not be able to allow or disallow the Maps content type.

2. **Default content:** This setting is available for the Main window and custom windows only.

To load window content automatically when you open a workspace, select “Save the window content with the workspace.” For example, if a custom window has an Internet browser loaded in it when you save the workspace, the next time you open the workspace, the browser will automatically load in the window at the same Web page as when the workspace was saved.

Saving the window content of the Main window saves the map that is loaded in the viewport. Saving the window content of a custom window saves the window mode (the type of content currently selected to display in the window) and, if the mode is Live Video or Archived Video, the device that is switched to the window.

Every time you save the workspace, the current content is saved, overwriting the previously saved content. If there is some particular content you always want to load in a window when the workspace is opened, such as Live Video, follow these steps:

- Select Live Video mode for the window.
- Drag the camera to the window.
- Edit the workspace.
- Select the window in the Windows list.
- Select “Save the window content with the workspace.”
- Close the Edit Workspace dialog box.
- Save the workspace.

- Edit the workspace.
- Clear “Save the window content with the workspace.”
- Close the Edit Workspace dialog box.

Clearing the default content setting ensures that you do not inadvertently overwrite the content you have saved. Whenever the workspace is opened, live video from the same camera will load in the window.

DETAILS TAB

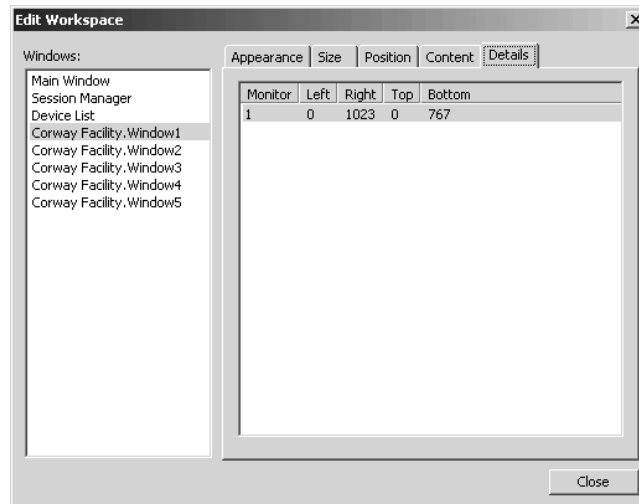


Figure 20. Edit Workspace Dialog Box - Details Tab

The Details tab provides data on your monitor(s). It is used for troubleshooting.

SAVING A WORKSPACE

To save a workspace, you must belong to, and log in under, a user group that allows you to save workspaces. You must also be logged in to your home server. If the Save Workspace option of the File menu is unavailable, then either you do not have permission to save workspaces, or you are not logged in to your home server. Refer to *User Groups* for information on access privileges. Refer to *Configuring Servers* for instructions on setting a home server.

To save a workspace:

1. If it is not already open, open the workspace you want to save, as described in *Opening a Workspace*. The name of the current workspace appears in the Main window title bar.
2. Click File > Save Workspace, or click the Main window and press Ctrl-S. The workspace is saved.

To save a workspace under a new name:

1. If it is not already open, open the workspace you want to save under a new name, as described in *Opening a Workspace*. The name of the current workspace appears in the Main window title bar.
2. Click File > Save Workspace As. The Save Workspace dialog box opens.
3. Select the folder where you want the new workspace saved and type a file name.
4. Click Save. The workspace is saved and the name of the new workspace appears in the Main window title bar.

WORKSPACE PREFERENCES

Workspace preferences determine which workspace, if any, opens automatically when you log in.

VMX300(-E) decides which workspace to open when a user logs in according to the scheme in Figure 21. Note that user preferences override the default workspace provided by your home server.

By default, your preferences are set to use the workspace provided by your home server. This applies the very first time you log in, and holds until you change your preferences.

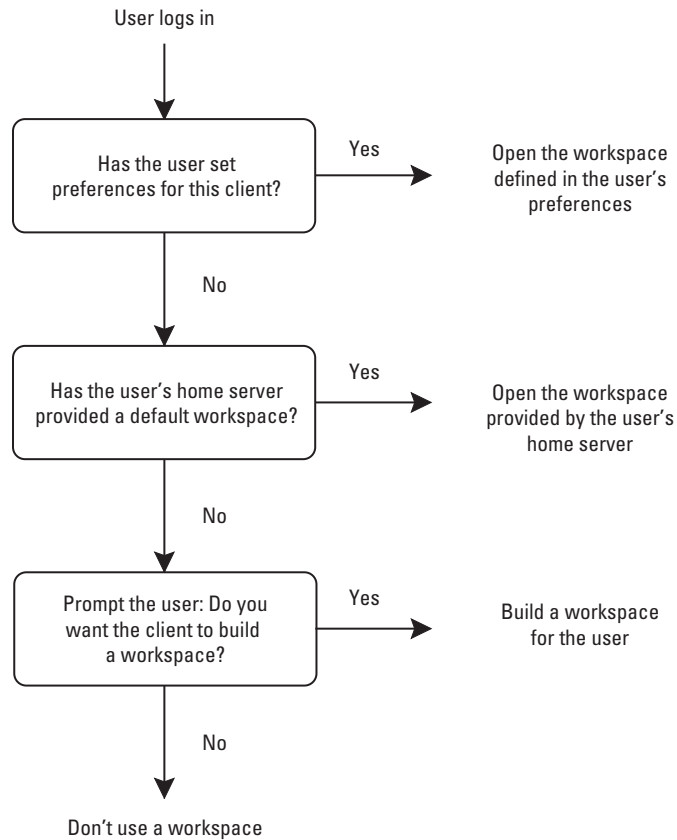


Figure 21. Workspace Decision Process

SETTING YOUR PREFERENCES

To set preferences, you must belong to, and log in under, a user group that allows you to open workspaces. You must also be logged in to your home server. If the Preferences option of the File menu is unavailable, then either you do not have permission to set preferences, or you are not logged in to your home server. Refer to *User Groups* for information on access privileges. Refer to *Configuring Servers* for instructions on setting a home server.

1. Click File > Preferences. The User Preferences dialog box opens.

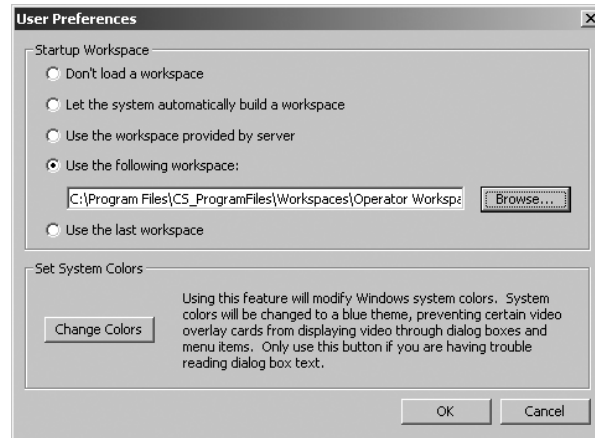


Figure 22. User Preferences Dialog Box

2. **Startup workspace:** The startup workspace is the workspace that is used when you log in. Select your preference:
 - a. **No workspace:** If you do not want VMX300(-E) to open a workspace for you automatically when you log in, click “Don’t load a workspace.” VMX300(-E) opens the Main window only, leaving all other windows closed.
 - b. **Build workspace:** If you want VMX300(-E) to build a workspace for you automatically when you log in, click “Let the system automatically build a workspace.” VMX300(-E) opens the Main window, the Device List, the Session Manager, and all your custom windows.
 - c. **Workspace supplied by server:** If you want VMX300(-E) to automatically open the default workspace defined on your home server when you log in, click “Use the workspace supplied by server.” If your home server has not provided a workspace, you are asked whether you want to build a workspace. If you say Yes, VMX300(-E) opens the Main window, the Device List, the Session Manager, and all your custom windows. If you say No, VMX300(-E) opens the Main window only, leaving all other windows closed.
 - d. **Select workspace file:** If you want to choose a workspace for VMX300(-E) to open when you log in, click “Use the following workspace.” Type the pathname of the workspace file you want opened, or Browse to select the desired file.
 - e. **Last workspace:** If you want VMX300(-E) to reconstruct the workspace to look exactly like it looked when you were last logged in to that client, click “Use the last workspace.” This allows you to reproduce the appearance of your last session, without having saved the workspace. If a workspace file was open when you were last logged in, VMX300(-E) opens the file with the appearance it last had. If you had made changes to the workspace, but you had not saved them, VMX300(-E) reproduces those changes, in spite of not having been saved. You do not need to have permission to edit or save workspaces to use the last workspace preference.
3. **Set system colors:** Some video overlay cards, such as the Quad Video Display card, display video through the text and borders of dialog boxes, making it difficult to read the information in the dialog box. If you have a video card in your workstation, and you are having trouble reading dialog box text, click Change Colors. This changes the Windows system colors to a blue theme, which prevents video from showing through. The blue theme lasts until you reboot the workstation, and it affects any one who uses the workstation for any application. If you reboot the workstation, you must click Change Colors again to go back to the blue theme. If you decide you do not want the blue theme, you can change the system colors through the Windows Control Panel Display Appearance or reboot the workstation.
4. Click OK. Your preferences are saved and the User Preferences dialog box closes.

Maps

Maps provide VMX300(-E) operators with a visual representation of your site, complete with the devices and alarms that are installed.

The system administrator customizes maps through the use of following methods:

- **Device icons:** Icons that represent the devices installed at your site appear on the maps. You can access a device's controls by clicking its icon. Refer to *Devices* for more information.
- **Predefined views:** Predefined views that allow you to quickly focus on a particular view of a map appear in the predefined views drop-down list. Refer to *Predefined Views* for more information.
- **Links between maps:** Hotlinks that allow you to load a related map or predefined view with a simple mouse click appear on the maps. Refer to *Hotlinks* for more information.
- **Scripts that automate common actions:** Scripts that automate common actions appear as labels on the maps. Click a label to run its script. Refer to *Labels* for more information.

Maps can be loaded into the map viewport that is part of the Main window, or into custom windows that are in Maps mode. The map viewport and custom windows have tools for loading maps and adjusting the view. Refer to *Loading Maps* and *Adjusting the Map Display* for more information.

LOADING MAPS

Maps can be loaded into the Main window map viewport or a custom window.

There are several ways you can load a map:

- Select the map from the maps drop-down list in the tool bar.
- Click a hotlink or label on a map that loads another map. Refer to *Hotlinks* and *Labels* for more information.
- Open a workspace that loads a map. Refer to *Workspaces* for more information.
- Drag the map from the Device List to the viewport or custom window. Refer to *Devices* for more information.

To load a map from the maps drop-down list:

1. Click the arrow to the right of the maps drop-down list. If you are loading the map into the map viewport, use the Maps drop-down list above the map viewport. If you are loading the map in a custom window, use the Maps drop-down list in the custom window tool bar. A list opens of all the maps you have access to on the servers you are connected to.
2. Click the name of the map you want to load. If a map is currently loaded, it closes. The selected map appears.

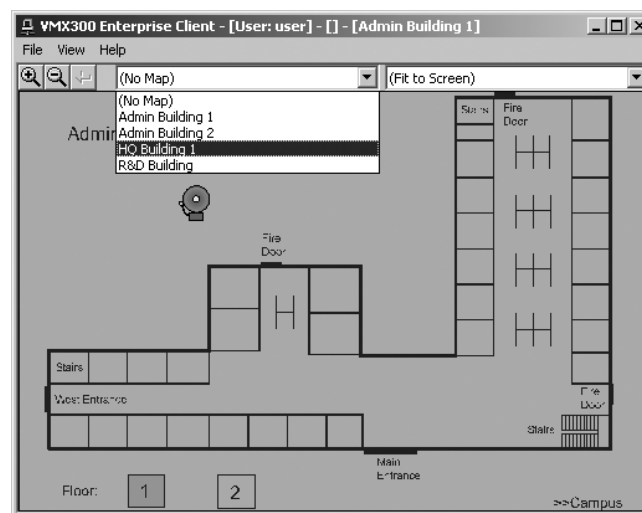


Figure 23. Loading a Map

ADJUSTING THE MAP DISPLAY

The VMX300(-E) client provides the following methods for changing the view of a map:

- Zoom buttons
- Previous View button
- Predefined views

ZOOM BUTTONS

Zoom In

The Zoom In button works two ways:

- Zoom in incrementally
- Zoom in on a selected part of the map

Incremental: To zoom in incrementally:

1. Click the Zoom In button and position the pointer over the map. The pointer appears as a magnifying glass with a plus sign in it.
2. Click the part of the map you want to zoom in on. The map appears at about 110% of its previous scale.

Selected area: To zoom in on a particular part of the map:

1. Click the Zoom In button and position the pointer over the map. The pointer appears as a magnifying glass with a plus sign in it.
2. Position the pointer at one corner of the area you want to magnify. Press and hold the left mouse button.
3. Drag the pointer to the opposite corner of the area you want to magnify. A rectangle delineating the area to magnify appears.
4. Release the mouse button. The selected area appears as large as possible to fit within the display area.

NOTE: You must click the Zoom In button each time you want to zoom in.

Zoom Out

The Zoom-Out button decreases the size of the displayed map by about 10%. To zoom out, click the Zoom Out button.

NOTE: You must click the Zoom Out button each time you want to zoom out.

PREVIOUS VIEW BUTTON

The Previous View button retrieves whatever was last displayed in the map viewport, allowing you to step back through the history of the viewport. Every time you change the display in the viewport, either by loading a different map or predefined view, or by zooming or scrolling, VMX300(-E) records the view.

To display the previous view, click the Previous View button. Continue clicking the Previous View button until you have stepped back to the desired view.

PREDEFINED VIEWS

Predefined views allow you to display a particular view of the currently loaded map by selecting a previously saved view from the predefined views drop-down list.

VMX300(-E) provides two default predefined views, Fit to Screen and One to One. As well, your system administrator can create custom predefined views. Predefined views created and saved by the system administrator are listed at the bottom of the predefined views drop-down list.

If you adjust the view so it does not coincide with a predefined view, Custom View appears in the drop-down list.

Fit to screen: Fit to Screen displays the loaded map as large as possible to fit within the current size of the map viewport.

One to one: One to One displays the loaded map at its actual size. If the map viewport is not large enough to display the entire map at its actual size, a portion of the map will be displayed.

To load a predefined view:

1. Click the arrow to the right of the predefined views drop-down list. A list of all the predefined views for the current map drops down.
2. Click the name of the predefined view you want to display. The predefined view loads in the viewport.

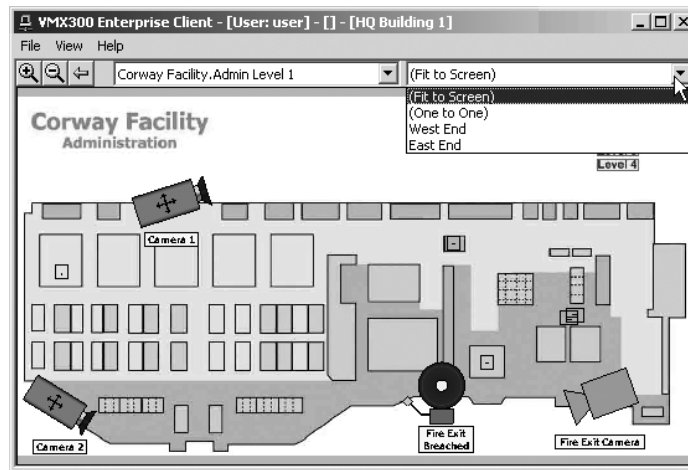


Figure 24. Loading a Predefined View

NOTE: Only the predefined views for the currently loaded map appear in the predefined views drop-down list.

HOTLINKS

A hotlink is an area of a map that, when clicked, loads another map or predefined view, effectively linking the two.

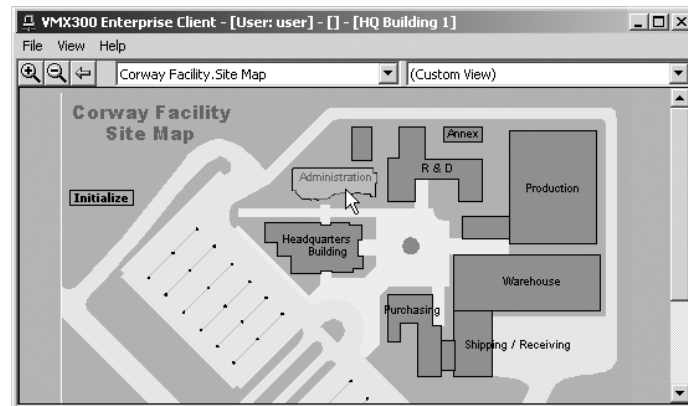


Figure 25. Viewing a Hotlink

Hotlinks are created by the system administrator. It is possible for the system administrator to define hotlinks that do not load another map or run a script of any sort. In this case, the hotlink is for information only, to define an area on the map.

The system administrator also defines whether a particular hotlink works with a single click or a double click, and whether the hotlink changes color when you move the pointer over it. Conventionally, a hotlink that runs a script changes color when you move the pointer over it.

NOTE: Your system administrator should instruct you in what hotlinks are available to you, as well as which hotlinks run a script, and how many clicks each one requires.

LABELS

A label is text that your system administrator places on a map.

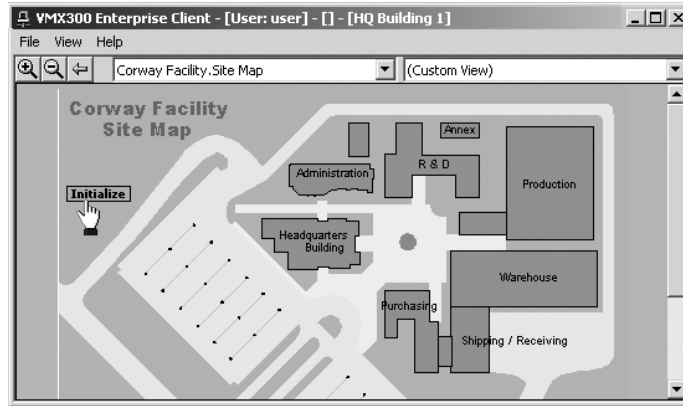


Figure 26. Viewing a Label

A label can have a script associated with it, so when you click the label, the script runs. In this case, the label provides a quick means of automatically executing a common action or sequence of actions.

It is also possible for the system administrator to define a label that does not run a script. In this case, the label is for information only. For example, a label might be used to identify an item on a map.

You can tell whether a label runs a script by positioning the pointer over the label. If the pointer changes to a hand with the index finger extended, the label runs a script.

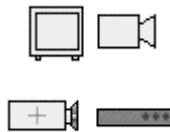
NOTE: The system administrator defines how many times you have to click a particular label to run its script. Your system administrator should instruct you in which labels run a script and how many clicks each label requires.

ICONS

Your system administrator can customize maps by placing icons on them that represent alarms, events, and devices installed at your site.

Device icons: Device icons provide tools that allow you to perform the following functions:

- Switch devices
- Access device controls
- View device gadgets
- Run scripts
- Stop scripts



For instructions on using device icons to perform these operations, refer to *Devices*.

Alarm icons: Alarm icons perform the following functions:

- Indicate when an alarm has been triggered
- Indicate when an alarm has been handled by an operator
- Indicate whether the condition that triggers the alarm is true or false
- Allow an operator to acknowledge an alarm



For more information on alarms and alarm icons, refer to *Alarms and Events*.

Devices

The equipment installed at your site is represented in VMX300(-E) through the Device List and device icons placed on maps, both of which provide tools to switch devices, access a device's controls, view device gadgets, run scripts, and stop scripts.

DEVICE ICONS

Device icons represent the equipment installed at your site.

Positioning the pointer over a device icon provides information on the device and its driver, including the device name, and the IP address and port of the VMX workstation the device driver is running on.

NOTE: A device icon that appears as a hollow outline indicates that the device driver for that device is not running. Notify your system administrator.

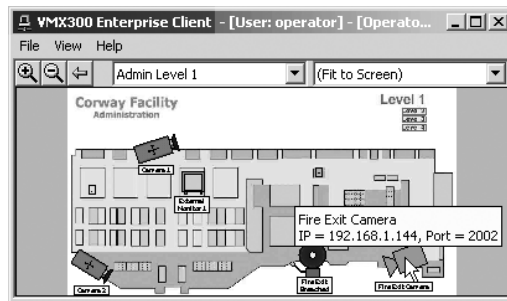


Figure 27. Viewing a Device Icon

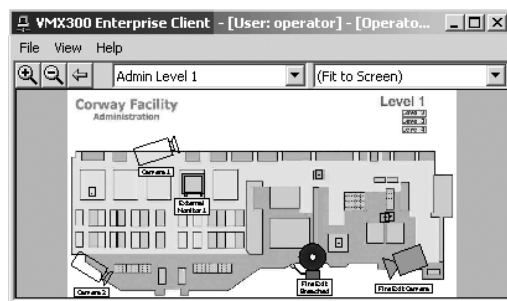


Figure 28. Device Icon - Hollow Outline

DEVICE LIST

The Device List lists the devices available on the servers the client is connected to, provided you have access privileges for the devices. The Device List allows you to switch devices and access device controls, without having a map with device icons loaded.

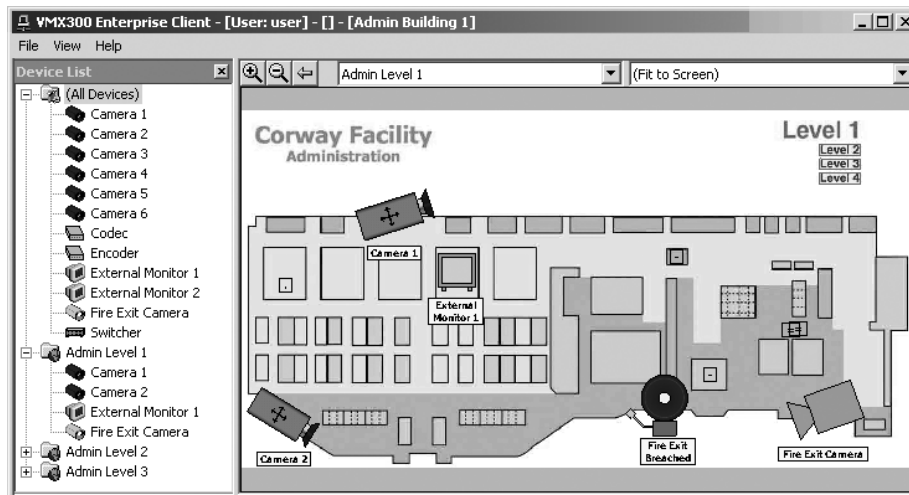


Figure 29. Device List

Organization: The Device List is organized into sublists. At the top of the Device List is a sublist headed All Devices, which lists all devices available on connected servers in alphabetical order. The All Devices sublist only appears in the Device List if you have access privileges for All Devices. To view the individual devices in the All Devices sublist, expand the list by clicking the plus sign to the left of All Devices.

Below the All Devices sublist is a sublist for each map you have access to. Expand the sublist for a map to view the devices on the map. A map only appears in the Device List if it has at least one device icon on it. This means that some devices listed in the All Devices sublist do not appear under any of the maps' sublists, namely, those devices that do not have an icon on a map.

A device can appear in the Device List more than once. If the device has an icon on more than one map, the device is listed under each map's sublist, as well as under the All Devices sublist.

Access privileges: If the Device List does not appear in the View menu, then you do not have permission to open or close it. If the Device List is open, you cannot close it. If it is closed, you cannot open it.

Open and close device list: To open the Device List window, click View > Device List. To close the Device List, click the Close button in the right corner of the window's title bar, or clear View > Device List.

Alternatively, if you have permission to edit workspaces, you can open and close the Device List window using the Edit Workspace option of the File menu. For information on adjusting the size and position of the Device List window, refer to *Workspaces* and *Appendix: Adjusting the Display*.

Load map: Load a map that is listed in the Device List by dragging the map from the Device List to the map viewport or to a custom window.

SWITCHING A DEVICE

Sources and destinations: The source of a signal is the device a signal originates from. For example, a video signal could come from a camera (live video) or a DVR (archived video). A signal's destination is where the signal is played (audio) or displayed (video). For example, monitors and custom windows can be used to display video signals.

Switching refers to sending a source signal to a destination. For example, if you switch a camera to a custom window, the camera's video signal is sent to the custom window, resulting in the camera's video displaying in the window.

Switching is accomplished in VMX300(-E) by dragging the source device to the destination. You can either drag device icons placed on maps, or devices listed in the Device List. Table B lists the different ways of switching devices.

NOTE: Switching from or to a particular analog device only works if your system administrator has set up the server to allow it. The system administrator should instruct you in which devices can be switched to which destinations.

Table B. Methods of Switching Devices

DRAG SOURCE	TO DESTINATION
Device in Device List	Device in Device List
Device in Device List	Device icon on map
Device in Device List	Custom window
Device icon on map	Device in Device List
Device icon on map	Device icon on map
Device icon on map	Custom window

CONTROLLING VMX300(-E) DEVICES

Instructions are provided in the following sections for controlling various VMX300(-E) devices. Note that the following devices do not have any controls available through the VMX300(-E) system:

- CM9760-ALM units
- External monitors
- Fixed cameras

CONTROLLING A PELCO PTZ CAMERA

The Pelco PTZ device driver currently supports the following camera models:

- Pelco Spectra II
- Pelco Spectra III
- Pelco Esprit

To control a particular camera, you must belong to, and be logged in under, a user group that grants you the necessary privileges. Your system administrator should instruct you in what privileges you have.

All Pelco PTZ camera controls are available through the Device Control dialog box. Some controls are also available in the gadget (go to a preset, run a pattern) or in the custom window display area (pan, tilt, zoom, iris, focus).

Before you can control a camera, you must switch the camera to a destination device, such as a custom window or external monitor. To switch the camera, drag the camera to the destination device. You can drag from/to device icons placed on maps or devices listed in the Device List. Refer to *Devices - Switching a Device* for more information on switching devices.

You cannot control a Pelco PTZ camera if it is locked by another user or by a script. If you attempt to control a locked camera, VMX300(-E) will display a message specifying that the camera is locked and who placed the lock. For more information, refer to *Locking a Camera*.

NOTE: To access Pelco PTZ camera controls, the Pelco PTZ device driver must be running. Device icons appear as a hollow outline when the device driver is not running. If you try to open the Device Control dialog box when the driver is not running, you will get a connection error. Notify your system administrator if the driver is not running.

PELCO PTZ GADGET



Figure 30. PTZ Gadget

The Pelco PTZ gadget has four parts:



- **Device control button:** The Device Control button opens the Device Control dialog box.
- **Presets drop-down list:** The Presets drop-down list lists the user-defined presets for that camera. Select a preset from the list to make the camera go to the preset. If the camera's current view is not the result of going to a preset, <Custom View> appears in the drop-down list. Refer to *Presets* for more information.
- **Patterns drop-down list:** The Patterns drop-down list lists the user-defined patterns for that camera. Select a pattern from the list to make the camera run the pattern. The camera will run the pattern repeatedly until it receives a new movement command. If the camera is not currently running a pattern, <No Pattern Running> appears in the drop-down list. Refer to *Patterns* for more information.



- **Lock button:** The Lock button allows you to take exclusive control of the camera. Click the Lock button to prevent a script or another operator from moving or locking the camera. Refer to *Locking a Camera* for more information.

OPENING THE DEVICE CONTROL DIALOG BOX

The Device Control dialog box provides tools for controlling a Pelco PTZ camera. To access the Device Control dialog box, you must belong to, and log in under, a user group that allows you to access the Device Control dialog box. The Device Control dialog box provides the following tabs:

- **Control tab:** Allows you to pan, tilt, zoom, and focus the camera, and adjust the Pan, Tilt, Zoom, Focus, and Iris for more information. The Control tab also allows you to lock the camera. Refer to *Locking a Camera* for more information.
- **Presets tab:** Allows you to manage and use presets. Refer to *Presets* for more information.
- **Patterns tab:** Allows you to manage and use patterns. Refer to *Patterns* for more information.
- **Auxiliaries tab:** Allows you to use camera auxiliaries. Refer to *Auxiliaries* for more information.
- **On-Screen Display tab:** Allows you to access the camera's On-Screen Display for more information.

Open the Device Control dialog box for a Pelco PTZ camera using one of the following methods:

- Double-click the camera's icon on a map.
- Double-click the device in the Device List.
- Right-click the device in the Device List and select Show Control Dialog from the pop-up menu.
- Open the camera's gadget and click the Device Control button.

PAN, TILT, ZOOM, IRIS, AND FOCUS

VMX300(-E) provides both mouse and keyboard controls for panning, tilting, zooming, focusing, and adjusting the iris of Pelco PTZ cameras.

Mouse Controls

You can control a camera from a custom window or from the Device Control dialog box:

- **Custom window:** To pan and tilt, click the custom window's display area in the direction you want to move the camera. For example, to pan and tilt up and to the left, click above and to the left of the center of the display area. Use the mouse wheel as described in Table C to zoom, focus, and adjust the iris.
- **Device Control dialog box:** The square on the Control tab functions as a control pad. The dot in the center of the control pad represents the current camera position. Click the control pad in the direction you want to pan and tilt the camera. For example, to pan and tilt down and to the right, click below and to the right of the dot. Use the mouse wheel or the Zoom, Focus, and Iris buttons to control the camera. The mouse and button functions are described in Table C.

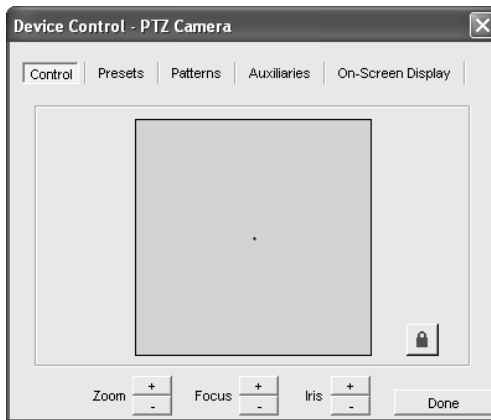


Figure 31. Device Control Dialog Box - Control Tab

Table C. Mouse Controls

CAMERA CONTROL	MOUSE ACTION	BUTTON
Pan left	Click to the left of center	N/A
Pan right	Click to the right of center	N/A
Tilt up	Click above the center	N/A
Tilt down	Click below the center	N/A
Zoom in	Turn the mouse wheel away from you	Zoom +
Zoom out	Turn the mouse wheel toward you	Zoom –
Close iris	Hold the Alt key depressed and turn the mouse wheel away from you	Iris –
Open iris	Hold the Alt key depressed and turn the mouse wheel toward you	Iris +
Focus out	Hold the Shift key depressed and turn the mouse wheel away from you	Focus –
Focus in	Hold the Shift key depressed and turn the mouse wheel toward you	Focus +

To pan and tilt the camera incrementally, click once. Clicking close to the center moves the camera in small increments. The further away from the center you click, the larger the increments the camera moves.

To pan and tilt the camera continuously, click and hold the mouse button depressed. Clicking close to the center moves the camera slowly. The further away from the center you click, the faster the camera moves. Release the mouse button to stop panning and tilting.

To zoom, focus, or adjust the iris incrementally, turn the mouse wheel one click. To zoom, focus, or adjust the iris continuously, turn the mouse wheel continuously.

Keyboard Controls

Keyboard controls work only in custom windows. They do not work in the Device Control dialog box. To use keyboard controls in a custom window, click the window's display area to make it active, then use keyboard controls as desired.

Table D. Keyboard Controls

CONTROL	KEYSTROKE	DESCRIPTION
Pan left	f	Left Arrow key
Pan right	g	Right Arrow key
Tilt up	h	Up Arrow key
Tilt down	i	Down Arrow key
Pan and tilt up and to the right	Pg Up	Page Up key on numeric keypad
Pan and tilt down and to the right	Pg Dn	Page Down key on numeric keypad
Pan and tilt up and to the left	Home	Home key on numeric keypad
Pan and tilt down and to the left	End	End key on numeric keypad
Zoom in	+	Plus key on numeric keypad
Zoom out	-	Minus key on numeric keypad
Open iris	Alt +	Hold Alt key depressed and press plus key on numeric keypad
Close iris	Alt -	Hold Alt key depressed and press minus key on numeric keypad
Focus out	Shift +	Hold Shift key depressed and press plus key on numeric keypad
Focus in	Shift -	Hold Shift key depressed and press minus key on numeric keypad

NOTE: To use navigation keys on the numeric keypad, Num Lock must be off.

PRESETS

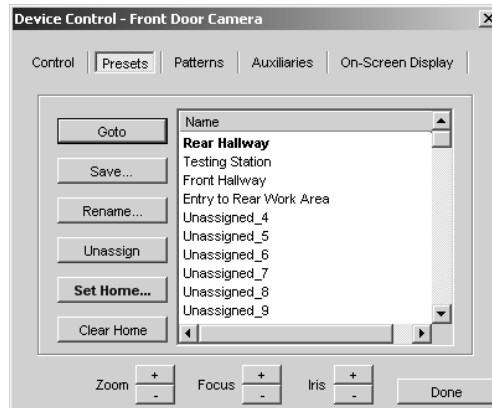


Figure 32. Device Control Dialog Box - Presets Tab

A preset is a predefined camera position that is stored in the camera. Each camera can have a limited number of presets defined for it. The maximum number of presets depends on the camera model.

The Presets tab of the Device Control dialog box lists the presets for the camera. Presets can appear in the list as Unassigned_*i*, where *i* is the preset's number. "Unassigned" indicates that the preset has not been assigned a name and script tag in VMX300(-E).

An unassigned preset might or might not have a stored camera position associated with it. To determine whether an unassigned preset has a camera position stored for it, select the preset and click Goto. If the camera moves, there is a stored camera position.

Assigning a preset does the following:

- It makes the preset name appear in the presets drop-down list in the camera's gadget.
- It gives the preset a script tag so scripts defined by the system administrator can refer to the preset.

You can assign a preset in two ways:

- **Save:** By saving the preset. Saving a preset saves the camera position, focus setting, name, and script tag. Refer to *Creating a Preset* for instructions on saving a preset to an unassigned preset number. Refer to *Editing a Preset* for instructions on saving a preset to a preset number that is already assigned.
- **Rename:** By renaming the preset. Renaming a preset saves the name and script tag, but does not affect the camera position stored for the preset. Refer to *Renaming a Preset* for information on renaming presets.

For information on presets defined in the camera, see the Pelco documentation for the appropriate camera model.

NOTE: Since presets are associated with a camera, rather than a user, any changes you make to a camera's presets affect all users with permission to access the presets.

 **TIP:** The order of the list on the Presets tab is retained in the presets drop-down list in the gadget. This allows you to define presets in the order you want them to appear in the drop-down list.

Going to a Preset

To make a camera go to a preset, you must belong to, and log in under, a user group that allows you to control that camera.

VMX300(-E) provides two methods of going to a preset:

- **Custom window:** Select the preset you want the camera to go to from the presets drop-down list in the camera's gadget. The presets drop-down list only lists presets that have been assigned a name and script tag through the Presets tab. To go to an unassigned preset, use the Presets tab in the Device Control dialog box.
- **Device control dialog box:** On the Presets tab for the desired camera, select the preset you want the camera to go to from the list and click Goto.

 **TIP:** Use the Goto option on the Presets tab to test whether an unassigned preset has a camera position associated with it, by selecting the preset and clicking Goto. If the camera moves, there is a stored camera position.

Creating a Preset

Creating a preset refers to saving a preset to an unassigned preset number. For instructions on saving a preset to a preset number that has previously been assigned, refer to *Editing a Preset*.

To create a preset for a Pelco PTZ camera, you must belong to, and log in under, a user group that allows you to edit the presets for that camera. When you create a preset, it becomes available to all users who have permission to control the camera.

The Save option used to create a preset saves the camera position, preset name, and script tag. If a camera position is already stored for that preset number, the stored camera position is replaced by the new one.

To determine whether an unassigned preset number has a camera position stored for it, select the preset in the Presets tab and click Goto. If the camera moves as result, there is a camera position stored for the selected preset number. To assign a name and script tag while retaining the stored camera position, use the Rename option described in *Renaming a Preset*.

To create a preset:

1. Pan, tilt and zoom the camera until the desired view is showing.
2. Open the Device Control dialog box for the desired camera and go to the Presets tab.
3. You can click one of the unassigned preset numbers (Unassigned_i) or, if you do not select an unassigned number, the new preset will be created in the next available unassigned position. Note: Selecting a preset that is already assigned is discussed in *Editing a Preset*.
4. Click Save. The Add New Preset dialog box opens.



Figure 33. Add New Preset Dialog Box

5. Type a unique name for the preset. Preset names are at most 50 characters long. They can include any letter, digit or special character, with the exception of single and double quotation marks. Preset names are not case sensitive.

A tag resembling the preset name appears in the Script Tag box. If the preset name contains special characters, they are omitted from the tag. Spaces are replaced with an underscore.

6. If you do not want to use the script tag provided by the system, type a unique tag of your choice. Script tags are at most 50 characters long. They can include any letter, digit or the underscore character, but cannot begin with a digit. They cannot contain spaces or special characters. Tags are not case sensitive. The script tag is used by administrators to refer to the preset in scripts.
7. Click OK. The Add New Preset dialog box will close and the name of the new preset will appear in the list of presets. If you selected Unassigned_i in step 3, the preset appears in the position you selected. If you did not select an unassigned position, the preset appears in the next available unassigned position in the list.

Editing a Preset

Editing a preset refers to saving a preset to a preset number that is already assigned. For instructions on saving a preset to an unassigned preset number, refer to *Creating a Preset*.

To edit a preset for a Pelco PTZ camera, you must belong to, and log in under, a user group that allows you to edit the presets for that camera. When you edit a preset, the changes you make affect other users with permission to access the preset.

The Save option used to edit a preset saves the camera position, preset name, and script tag, replacing the previously defined camera position, preset name, and script tag. To assign a name and script tag while retaining the existing camera position, use the Rename option described in *Renaming a Preset*.

To edit a preset:

1. Pan, tilt and zoom the camera until the desired view is showing.
2. Open the Device Control dialog box for the desired camera and go to the Presets tab.
3. Click the desired preset in the list, and then Click Save. The Edit Preset Properties dialog box opens.

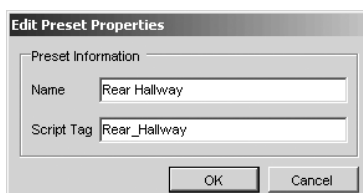


Figure 34. Edit Preset Properties Dialog Box

4. Edit the name and script tag, if desired.
5. Click OK. The Edit Preset Properties dialog box closes and the new settings are saved.

Renaming a Preset

Renaming a preset refers to changing the preset's name and/or script tag using the Rename option. For instructions on changing the camera position, refer to *Editing a Preset*.

To rename a preset for a Pelco PTZ camera, you must belong to, and log in under, a user group that allows you to edit the presets for that camera. When you rename a preset, the changes you make affect other users with permission to access the preset.

To rename a preset:

1. Open the Device Control dialog box for the desired camera and go to the Presets tab.
2. Click the preset you want to rename, and then click Rename. The Edit Preset Properties dialog box opens.
3. Edit the name and script tag as desired.
4. Click OK. The Edit Preset Properties dialog box closes and your changes are saved.

NOTE: Changing the script tag for a preset that is referred to in a script introduces an error into the script. To correct the error, the system administrator must update the script so it uses the preset's new script tag.

Unassigning a Preset

Unassigning a camera's preset deletes the preset's name and script tag, leaving the camera position stored in the camera intact. When you unassign a preset, the following changes take effect:

- The preset name no longer appears in the presets drop-down list in the camera's gadget.
- Scripts defined by the system administrator can no longer refer to the preset.

To unassign a camera's preset, you must belong to, and log in under, a user group that allows you to edit the presets for that camera.

To unassign a preset:

1. Open the Device Control dialog box for the desired camera and go to the Presets tab.
2. Click the preset you want to unassign, and then click Unassign. The preset's name and script tag are deleted and the preset appears in the list as Unassigned_i. Scripts will no longer be able to refer to the preset, and the preset will no longer be available through the presets drop-down list in the camera's gadget.

NOTE: Unassigning a preset that is referred to in a script introduces an error into the script.

Setting the Camera's Home Preset

A camera's home preset is the preset the camera goes to when it has been idle for a predefined time. The home preset displays in bold print in the Device Control dialog box presets list.

To set a camera's home preset, you must belong to, and log in under, a user group that allows you to edit the presets for that camera.

NOTE: You can define a home preset or a default pattern for a camera, but not both. Setting the home preset clears the default pattern, if there is one.

To set the home preset:

1. Open the Device Control dialog box for the desired camera and go to the Presets tab.
2. Click the preset you want as the home preset, and then click Set Home. The Edit Home Preset dialog box opens.



Figure 35. Edit Home Preset Dialog Box

3. Enter the number of hours, minutes, and seconds that you want the camera to be idle before it goes to the home preset position.
4. Click OK. The Edit Home Preset dialog box closes. The selected preset becomes the home preset, replacing the previous home preset or default pattern if there was one. The new home preset appears in bold print in the list.

Clearing the Camera's Home preset

To clear a camera's home preset, you must belong to, and log in under, a user group that allows you to edit the presets for that camera.

To clear the home preset:

1. Open the Device Control dialog box for the desired camera and go to the Presets tab.
2. Select the home preset from the list of presets, and then click Clear Home. The selected preset no longer appears in bold print in the list. The camera has no home preset.

PATTERNS

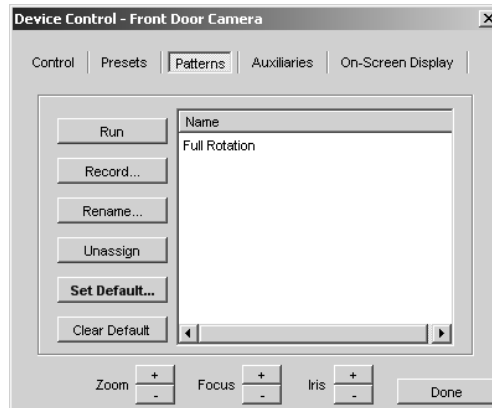


Figure 36. Device Control Dialog Box - Patterns Tab

A pattern is a user-defined set of camera movements and iris/focus adjustments that is stored in the camera. Each camera can have a limited number of patterns defined for it. The maximum number of patterns depends on the camera model.

The Patterns tab of the Device Control dialog box lists the patterns for the camera. Patterns can appear in the list as Unassigned_*i*, where *i* is the pattern's number. "Unassigned" indicates that the pattern has not been assigned a name and script tag in VMX300(-E).

To determine whether an unassigned pattern has a camera movement stored for it, select the pattern and click Run. If the camera moves as a result, there is a stored camera movement.

Assigning a pattern does the following:

- It makes the pattern name appear in the patterns drop-down list in the camera's gadget.
- It gives the pattern a script tag so scripts defined by the system administrator can refer to the pattern.

You can assign a pattern in two ways:

- **Record:** By recording the pattern. Recording a pattern saves the camera movement, name, and script tag. Refer to *Creating a Pattern* for instructions on recording a pattern and saving it to an unassigned pattern number. Refer to *Editing a Pattern* for instructions on saving a pattern to a pattern number that is already assigned.
- **Rename:** By renaming the pattern. Renaming a pattern saves the name and script tag, but does not affect the camera movement stored for the pattern. Refer to *Renaming a Pattern* for information on renaming patterns.

For information on patterns defined in the camera, see the Pelco documentation for the appropriate camera model.

NOTE: Since patterns are associated with a camera, rather than a user, any changes you make to a camera's patterns affect all users with permission to access the pattern.


TIP: The order of the list on the Patterns tab is retained in the patterns drop-down list in the gadget. This allows you to define patterns in the order you want them to appear in the drop-down list.

Running a Pattern

To make a camera run a pattern, you must belong to, and log in under, a user group that allows you to control that camera. When you run a pattern, the pattern runs repeatedly until the camera receives a new movement command. See [Stopping a Pattern](#) for more information.

VMX300(-E) provides two methods of running a pattern:

- **Custom window:** Select the pattern you want the camera to run from the patterns drop-down list in the camera's gadget. Note: the patterns drop-down list only lists patterns that have been assigned a name and script tag through the Patterns tab. To go to an unassigned pattern, you must use the Patterns tab in the Device Control dialog box.
- **Device control dialog box:** On the Patterns tab for the desired camera, select the pattern you want the camera to run from the list and click Run.

 **TIP:** Use the Run option on the Patterns tab to test whether an unassigned pattern has a camera movement associated with it, by selecting the pattern and clicking Run. If the camera moves, there is a stored camera movement.

Stopping a Pattern

To stop a pattern that a camera is running, you must belong to, and log in under, a user group that allows you to control that camera.

When a pattern is run, the pattern runs repeatedly until it receives a new movement command. Any of the following movement commands will stop a running pattern:

- Pan
- Tilt
- Zoom
- Go to a pattern
- Run a (different) pattern

Creating a Pattern

Creating a pattern refers to recording a pattern to an unassigned pattern number. For instructions on saving a pattern to a pattern number that is already assigned, refer to [Editing a Pattern](#).

To create a pattern for a Pelco PTZ camera, you must belong to, and log in under, a user group that allows you to edit the patterns for that camera. When you create a pattern, it becomes available to all users who have permission to control the camera.

The Record option used to create a pattern saves the camera movement, pattern name, and script tag. If a camera movement is already stored for that pattern number, the stored camera movement will be replaced by the new one.

To determine whether an unassigned pattern number has a camera movement stored for it, select the pattern in the Patterns tab and click Run. If the camera moves as result, there is a camera movement stored for the selected pattern number. To assign a name and script tag while retaining the stored camera movement, use the Rename option described in [Renaming a Pattern](#).

To create a pattern:

1. Open the Device Control dialog box for the desired camera and go to the Patterns tab.
2. If you want, select Unassigned_i for the desired pattern number from the list. If you do not select an unassigned number, the new pattern will be created in the next available unassigned position.
3. Click Record. The Record New Pattern dialog box opens.

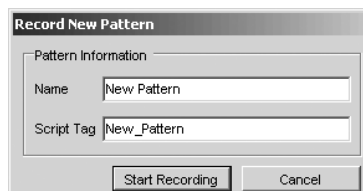


Figure 37. Record New Pattern Dialog Box

4. Type a unique name for the pattern. Pattern names are at most 50 characters long. They can include any letter, digit or special character, with the exception of single and double quotation marks. Pattern names are not case sensitive.

- Optional: Type a script tag.
- Click Start Recording. The Start Recording button changes to a Stop Recording button.

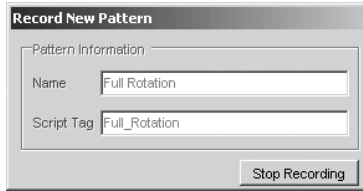


Figure 38. Record New Pattern - Stop Recording

- Pan, tilt, zoom, focus, and adjust the camera's iris as desired.
- Click Stop Recording. The Record New Pattern dialog box closes and the name of the new pattern appears in the list of patterns. If you selected Unassigned_i in step 2, the new pattern appears in the position you selected. If you did not select a position, the new pattern appears in the next available unassigned position in the list.

Editing a Pattern

Editing a pattern refers to saving a pattern to a pattern number that is already assigned. For instructions on saving a pattern to an unassigned pattern number, refer to *Creating a Pattern*.

To edit a pattern for a Pelco PTZ camera, you must belong to, and log in under, a user group that allows you to edit the patterns for that camera. When you edit a pattern, the changes you make affect other users with permission to access the pattern.

The Record option used to edit a pattern saves the camera movement, pattern name, and script tag, replacing the previously defined camera movement, pattern name, and script tag. To assign a name and script tag while retaining the existing camera movement, use the Rename option described in *Renaming a Pattern*.

To edit a pattern:

- Open the Device Control dialog box for the desired camera and go to the Patterns tab.
- Click the desired pattern in the list, and then click Record. The Edit Pattern Properties dialog box opens.

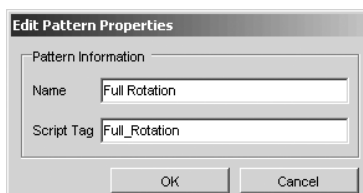


Figure 39. Edit Pattern Properties Dialog Box

- Edit the name and script tag, if desired.
- Click Start Recording. The Start Recording button changes to a Stop Recording button.

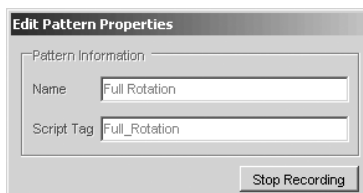


Figure 40. Edit Pattern Properties - Stop Recording

- Pan, tilt, zoom, focus, and adjust the camera's iris as desired.
- Click Stop Recording. The Edit Pattern Properties dialog box closes and the new settings are saved.

Renaming a Pattern

Renaming a pattern refers to changing the pattern's name and/or script tag using the Rename option. For instructions on changing the camera movement, refer to *Editing a Pattern*.

To rename a pattern for a Pelco PTZ camera, you must belong to, and log in under, a user group that allows you to edit the patterns for that camera. When you rename a pattern, the changes you make affect other users with permission to access the pattern.

To rename a pattern:

1. Open the Device Control dialog box for the desired camera and go to the Patterns tab.
2. Click the pattern you want to rename from the list of patterns, and then click Rename. The Edit Pattern Properties dialog box opens.
3. Edit the name and script tag as desired, and then click OK. The Edit Pattern Properties dialog box closes and your changes are saved.

NOTE: Changing the tag for a pattern that is referred to in a script introduces an error into the script. To correct the error, the system administrator must update the script so it uses the pattern's new script tag.

Unassigning a Pattern

Unassigning a camera's pattern deletes the pattern's name and script tag, leaving the camera movement stored in the camera intact. When you unassign a pattern, the following changes take effect:

- The pattern name no longer appears in the patterns drop-down list in the camera's gadget.
- Scripts defined by the system administrator can no longer refer to the pattern.

To unassign a camera's pattern, you must belong to, and log in under, a user group that allows you to edit the patterns for that camera.

To unassign a pattern:

1. Open the Device Control dialog box for the desired camera and go to the Patterns tab.
2. Click the pattern, and then click Unassign. The pattern's name and script tag are deleted and the pattern appears in the list as Unassigned_i. Scripts will no longer be able to refer to the pattern, and the pattern will no longer be available through the patterns drop-down list in the camera's gadget.

NOTE: Unassigning a pattern that is referred to in a script introduces an error into the script.

Setting the Camera's Default Pattern

A camera's default pattern is the pattern the camera runs when it has been idle for a predefined time. The default pattern displays in bold print in the Device Control dialog box patterns list.

To set a camera's default pattern, you must belong to, and log in under, a user group that allows you to edit the patterns for that camera.

NOTE: You can define a default pattern or a home preset for a camera, but not both. Setting the default pattern clears the home preset, if there is one.

To set the default pattern:

1. Open the Device Control dialog box for the desired camera and go to the Patterns tab.
2. Click the pattern you want as the default pattern, and then click Set Default. The Edit Default Pattern dialog box opens.

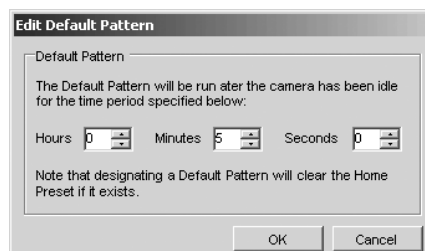


Figure 41. Edit Default Pattern Dialog Box

3. Enter the number of hours, minutes, and seconds that you want the camera to be idle before it runs the default pattern.

The Edit Default Pattern dialog box closes. The selected pattern becomes the default pattern, replacing the previous default pattern or home preset if there was one. The new default pattern appears in bold print in the list.

Clearing the Camera's Default Pattern

To clear a camera's default pattern, you must belong to, and log in under, a user group that allows you to edit the patterns for that camera.

To clear the default pattern:

1. Open the Device Control dialog box for the desired camera and go to the Patterns tab.
2. Click the default pattern from the list of patterns, and then click Clear Default. The selected pattern no longer appears in bold print in the list. There is no default pattern for that camera.

SEQUENCES

A sequence is a predefined series of camera movements and positions. Sequences are implemented in VMX300(-E) as scripts defined by the system administrator. To run a script, you must belong to, and log in under, a user group that allows you to run that script.

Run: To run a script, complete the following steps

1. Open the pop-up menu using one of the following methods:
 - Click the custom window you want to start the script from and press Alt-Space Bar.
 - In the Device List, right-click the device you want to start the script from.
 - Right-click the device icon for the destination device you want to start the script from.
2. In the pop-up menu, click Run Script, and then select the desired script from the submenu. The selected script will run, and an entry for the script appears in the Session Manager.

Stop: To stop a script, use one of the following methods:

- Click the script entry in the Session Manager, and then click the Stop button on the Session Manager tool bar.
- Open the pop-up menu (using one of the methods described in step 1, above) and then click Stop Scripts. This stops all scripts started from that destination device or window.

For more information on working with scripts, refer to the *Scripts* section.

AUXILIARIES

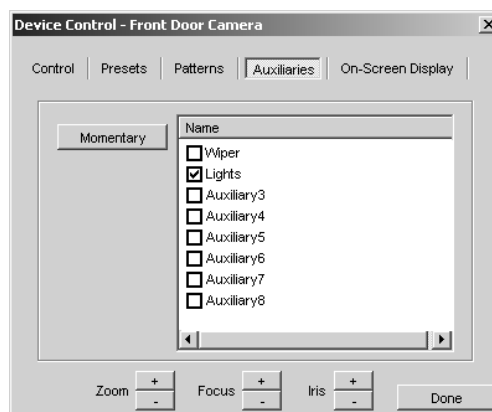


Figure 42. Device Control Dialog Box - Auxiliaries Tab

Pelco PTZ cameras can support auxiliary features, such as a wiper or lights, which are physically connected to auxiliary points on the camera. Each camera can have a limited number of auxiliaries. The maximum number depends on the camera model.

Auxiliaries are listed on the Auxiliaries tab of the Device Control dialog box. By default, auxiliaries are named Auxiliary*i*, where *i* is the auxiliary's number. Your system administrator can change an auxiliary's name to something more meaningful.

Controlling an Auxiliary

To control a camera's auxiliaries, you must belong to, and log in under, a user group that allows you to control the auxiliaries for that camera.

VMX300(-E) allows you to set an auxiliary to run continuously, or to run for just a moment.

To run an auxiliary for a moment, select the desired auxiliary on the Auxiliaries tab and click Momentary. The auxiliary feature operates for a moment, then stops.

To run an auxiliary continuously, select the desired auxiliary on the Auxiliaries tab, or double-click the auxiliary name. The auxiliary feature operates until the check box is cleared.

The Momentary option stops the auxiliary feature from running continuously. If the auxiliary is running continuously when you give the command to run it momentarily, the feature operates for a moment, then stops, and the check box is automatically cleared.

NOTE: In order for auxiliary controls to function as described here, the camera's auxiliary setting must be set to continuous mode.

ON-SCREEN DISPLAY

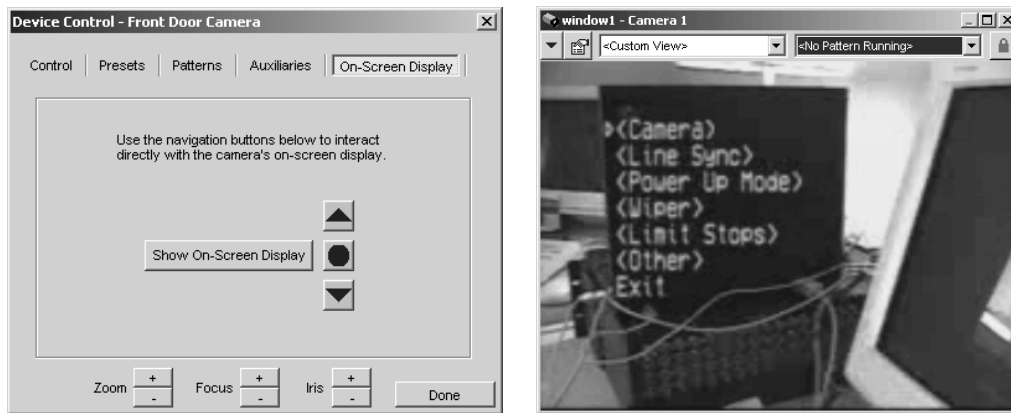


Figure 43. Device Control Dialog Box - On-Screen Display Tab (left) and Sample On-Screen Display (right)

The On-Screen Display tab of the Device control dialog box allows you to display the camera's on-screen menu on the destination device or custom window the camera is switched to. The options presented in the on-screen display depend on the camera model. Refer to the Pelco camera documentation for information on specific options.

Using the On-Screen Menu

To display the camera's on-screen menu:

1. Open the Device Control dialog box for the desired camera and go to the On-Screen Display tab.
2. Click Show On-Screen Display. The camera's on-screen menu appears in the destination device or custom window.



3. **Navigate the menu:** Use the up arrow and down arrow buttons on the On-Screen Display tab to move the option selector beside the desired menu option. Or you can send tilt up and tilt down commands using mouse or keyboard controls to move the option selector up and down in the menu. When instructed to press Iris Open or Iris Close, use the Iris Open and Iris Close button on the On-Screen Display tab (these buttons do not actually open or close the iris).



4. **Select a menu item:** With the option selector positioned beside the desired option, click the Select On-Screen Display Menu Item button. The selected option executes.
5. **Exit:** To close the menu, navigate to the Exit option and click the Select On-Screen Display Menu Item button.

LOCKING A CAMERA

You can prevent other users or scripts from controlling a Pelco PTZ camera by locking the camera. When a camera is locked, only the user or script that placed the lock can control the camera. If you attempt to control a locked camera, VMX300(-E) will display a message specifying that the camera is locked and who placed the lock. To lock and control a particular camera, you must belong to, and log in under, a user group that allows you to lock and control that camera.

Locking a camera prevents another user or script from:

- Panning, tilting, zooming, focusing, and adjusting the camera's iris
- Managing presets and sending the camera to presets
- Managing and running patterns


Locking has no effect on auxiliaries. Scripts and other users can still control auxiliaries when the camera is locked, regardless of their priority.

Priority: Every VMX300(-E) user and script has a priority assigned by the system administrator. VMX300(-E) uses these priorities to resolve situations in which two or more users or scripts attempt to control a particular device at the same time. The user with the higher priority is given control of the device.

Taking the Lock: Depending on your priority, you might be able to take the lock from another user or a script that has locked a camera, giving you control of the camera. You can take the lock from any user with lower priority than you. You can take the lock from any script with equal or lower priority.

Automatic Unlock: VMX300(-E) automatically unlocks a camera you have locked under the following circumstances:

- If you log off, either by closing the client or by logging in a new user.
- If a workspace is opened.
- If you locked the camera from the Control tab of the Device Control dialog box and you close the dialog box.
- If you locked the camera from the gadget in a custom window and you change the content type for that window.
- If you locked the camera from the gadget in a custom window and the video input to the window is changed, either by you or by a script.
- If you locked the camera from the gadget in a custom window and you clear Visible for that window in the Workspace Properties dialog box.

 **TIP:** To prevent VMX300(-E) from automatically unlocking a camera you have locked, use the Lock button on the Device Control dialog box, rather than the Lock button in the gadget.

Understanding the Lock Button



The Lock button is used to lock and unlock the camera, and also provides information on whether the camera is currently locked, whether you can take the lock, and whether you can control the camera.

Color: The color of the padlock in the Lock button indicates whether you can control the camera. When the padlock is green, you can control the camera. When the padlock is yellow or red, you cannot control the camera. To control a particular camera, you must belong to, and log in under, a user group that allows you to control that camera. If you do not have permission to control the camera, the padlock will always be red or yellow. Table E summarizes the meanings of the different lock colors.

Table E. Different Lock Colors

LOCK COLOR	INDICATES
Green	The camera is unlocked.
Yellow	A script has locked the camera.
Red	A user has locked the camera.

Position: The position of the Lock button indicates whether or not you can lock the camera. When the button is out, the camera either isn't locked, or it is locked, but you can take the lock from the user or script that placed the lock. When the Lock button is in, the camera is locked and you cannot take the lock from the user or script that placed the lock. To lock a particular camera, you must belong to, and log in under, a user group that allows you to lock that camera. If you do not have permission to lock the camera, the Lock button will always be in.

Permissions override priority. No matter how high your priority, you will never be able to lock or control a camera unless you have the necessary permissions.

Location of Lock Buttons: The Lock button is located in the Pelco PTZ gadget and on the Control tab of the Device Control dialog box.

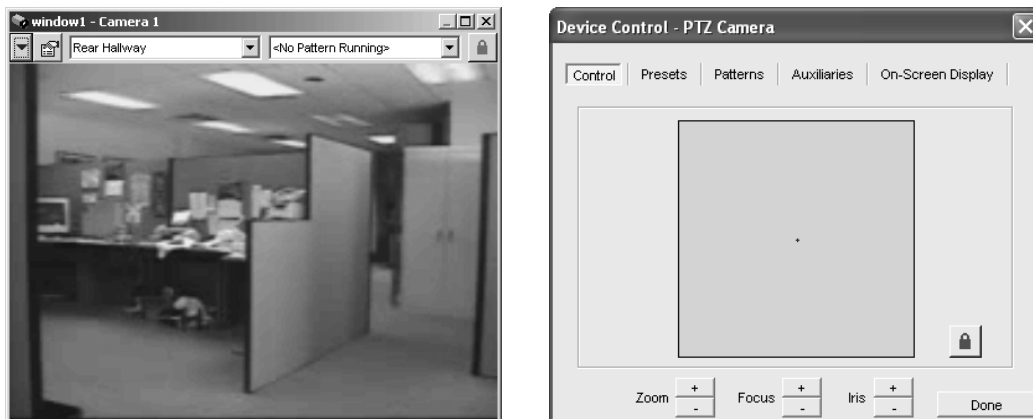


Figure 44. Lock Button Locations

If you have the Control tab and the camera gadget open at the same time, you see two different instances of the Lock button. These two Lock buttons are independent of each other:

- **Lock from Gadget:** If you locked the camera from the gadget, the Lock button on the Control tab is red/in, indicating that you cannot take the lock or control the camera from the Control tab. The Lock button on the gadget is green/in, indicating that you have locked the camera and can control it using keyboard controls or by clicking a custom window.
- **Lock from Device Control:** If you locked the camera from the Control tab, the Lock button in the gadget is red/in, indicating that you cannot take the lock through the gadget or control the camera using keyboard controls or by clicking a custom window. The Lock button on the Control tab is green/in, indicating that you have locked the camera and can control it through the Control tab.

When you do not have the lock, the different instances of the Lock button are always in the same state.

Table F summarizes the different states of the Lock button.

Table F. Different States of the Lock Button

LOCK BUTTON COLOR/POSITION	INDICATES
Green/In	You have locked the camera from the window where the green/in Lock button is located. You can control the camera from this window. A user with higher priority can take the lock from you and subsequently control the camera. A script with equal or higher priority can take the lock from you and subsequently control the camera.
Green/Out	The camera is not locked. You can control the camera. You can lock the camera.
Yellow/In	A script with higher priority than you has locked the camera. The script can control the camera. You cannot take the lock from the script. You cannot control the camera.
Yellow/Out	A script with equal or lower priority than you has locked the camera. You cannot control the camera, but you can take the lock from the script and subsequently control the camera.
Red/In	A user with equal or higher priority than you has locked the camera. The user can control the camera. You can neither take the lock nor control the camera from the window where the red/in Lock button is located. Note: The user who locked the camera could be you. When you lock the camera through the gadget, the Lock button on the Control tab is red/in. When you lock the camera through the Control tab, the Lock button in the gadget is red/in.
Red/Out	A user with lower priority than you has locked the camera. You cannot control the camera, but you can take the lock from the lower priority user and subsequently control the camera.



TIP:

- You can only lock the camera when the Lock button is out.
- You can only control the camera when the padlock is green.

CAPTURING LIVE VIDEO

Some canvas gadgets have a Capture and Save Image button that allows you to capture an image of the video displayed in the window. Images are saved in JPEG file format.

To capture a live video image complete the following steps:



1. Click the Gadgets button, and then select the canvas gadget from the drop-down list. The canvas gadget displays in the window's control bar.



2. Click the Capture and Save Image button. The Save JPEG As dialog box opens.
3. Browse to the desired folder and type in a file name.
4. Click Save. The image file is saved and the Save JPEG As dialog box closes.

CONTROLLING A PELCONET DEVICE

The PelcoNet MPEG device driver currently supports the following devices:


- PelcoNet 300 Series decoders
- PelcoNet 350 Series encoders
- PelcoNet 4001A encoder/decoder
- NVR300 Series network video recorders

To control a particular PelcoNet device, you must belong to, and log in under, a user group that grants you the necessary privileges. Your system administrator should instruct you in what privileges you have.

NOTE: To access PelcoNet device controls, the PelcoNet MPEG device driver must be running. Device icons appear as a hollow outline when the device driver is not running. If you try to open the Device Control dialog box when the driver is not running, you will get a connection error. Notify your system administrator if the driver is not running.

PELCONET DEVICE CONTROLS

PelcoNet device controls are available through the PelcoNet embedded web server, which can be accessed using any of the following methods:

- Double-click the device icon on a map.
- Double-click the device in the Device List.
- Right-click the device in the Device List and then click Show Control Dialog from the pop-up menu.
-  Open the PelcoNet MPEG Gadget, and then click the Device Control button (refer to the *PelcoNet MPEG Gadget* section for instructions on opening this gadget).

Refer to the PelcoNet product documentation for information on controls available through the embedded web server.

GADGETS AVAILABLE WHEN VIEWING VIDEO FROM A PELCONET DEVICE

When you are viewing video from a PelcoNet transmission system, VMX300(-E) provides the following gadgets:

- A gadget for the camera that is connected to the PelcoNet device. A fixed camera gadget contains no tools. Refer to the *Controlling a Pelco PTZ Camera* section for information on the gadget provided with a PTZ camera.
- A gadget for the PelcoNet device; this provides only one tool, the Device Control button, which is described in the *PelcoNet MPEG Gadget* section.
- A gadget for the tools provided by the VMX300(-E) PelcoNet MPEG driver; these tools are described in the *PelcoNet Canvas Gadget: VMX300(-E) Tools* section.

To select a gadget, click on the gadgets button, and then click the type of gadget that you want to view.



Figure 45. Selecting a PelcoNet Gadget

PelcoNet MPEG Gadget

The PelcoNet MPEG gadget has one button, the Device Control button, which opens the PelcoNet device's embedded web server. Refer to the PelcoNet product documentation for information on controls available through the embedded web server.



Figure 46. PelcoNet MPEG Gadget

PelcoNet Canvas Gadget: VMX300(-E) Tools

The VMX300(-E) tools provided by the PelcoNet canvas gadget depend on what mode the custom window is in, Live Video mode or Archived Video mode.

Live Video Mode: Audio Controls and Image Capture



Figure 47. \PelcoNet Canvas Gadget for Live Video

When the custom window is in Live Video mode, the PelcoNet canvas gadget provides the following tools and information:

Registered: 192.168.1.59

Registered IP: This section of the gadget displays the IP address of the PelcoNet device.



Microphone button: The Microphone button opens an audio channel from your VMX300(-E) workstation to the PelcoNet device. It mimics a push-to-talk microphone: click the Microphone button and hold it depressed to talk, and release the button when you have finished talking. If the Speaker button is on, the Microphone button mutes incoming audio from the speaker. For the Microphone button to work, the PelcoNet device must be configured for audio. Your system administrator should inform you on whether the device is configured for audio.



Speaker button: The Speaker button allows you to listen to audio from the source device connected to the PelcoNet device, such as a camera equipped with a microphone. Click the Speaker button to listen. Click the button again to close the audio channel. For the Speaker button to work, the PelcoNet device and the source device must be configured for audio. Your system administrator should inform you on whether the devices are configured for audio.



Capture and Save button: The Capture and Save button allows you to take a snapshot of the video displayed in the window and save the image as a JPEG file.

MPEG-4

Stream-type identification: This section of the gadget identifies the current stream as MPEG-4 or MPEG-2.

Archived Video Mode: NVR300 Controls

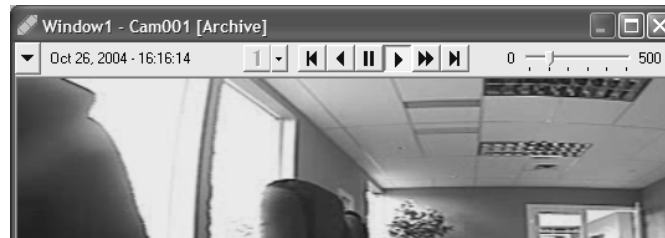


Figure 48. PelcoNet Canvas Gadget for Archived Video

When the custom window is in Archived Video mode, the PelcoNet canvas gadget provides the following tools and information:

Oct 26, 2004 - 16:16:14

Date/Time: This section identifies the date and time of the recorded video that is currently displayed in the custom window.



Stream Selector: Select the stream you want to view from the drop-down list. This option is not available when the stream number at the left is grayed out.



Back 1 Minute: Click this button to rewind the video one minute.



Back 10 Seconds: Click this button to rewind the video 10 seconds.



Pause: Click this button to pause the video.



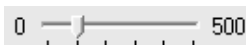
Play: Click this button to play the video.



Fast Forward: Click this button to advance the video.



Forward 1 Minute: Click this button to advance the video one minute.



% Playback Speed: Move the slider to the right to increase the speed at which the video plays. Move the slider to the left to decrease the speed at which the video plays.

CONTROLLING A DX8000 SERIES DVR

The VMX300(-E) controls Pelco DX8000 Series digital video recorders (DVRs). In this document, the term “DX8000 DVR” is used to refer to any DVR in the DX8000 series that is supported by the DX8000 driver. Note that the VMX300(-E) supports DX8000 software version level 1.1.00.1121 only.

To control a DX8000 DVR, you must belong to, and be logged in under, a user group that grants you the necessary privileges. Your system administrator should instruct you in what privileges you have.

NOTE: To access DX8000 DVR controls, the DX8000 driver must be running. If the DX8000 DVR icons appear as a hollow outline, notify your system administrator that the device driver is not running.

You can view live video from a camera that is connected, either directly or through one or more other devices, to a DX8000 Series DVR. To view live video in a custom window, the window must be in Live Video mode. The DX8000 gadget provides one tool for controlling the DVR when viewing live video.

You can view archived video from a DX8000 DVR in a custom window that is in Archived Video mode. The DX8000 gadget provides tools for controlling the DVR when viewing archived video.

VIEWING LIVE VIDEO

You can view live video and control cameras through the DX8000. Simply drag the DX8000 camera to the custom window and use the standard keyboard and mouse controls to pan, tilt, zoom, focus, adjust the iris, go to presets, and run patterns. For information on the specific controls available for a particular camera, refer to the instructions for the appropriate camera or PelcoNet device in this *Devices* section.

1. Click the custom window you want to view video in and press Alt-Space Bar. Or, if the window has a Windows title bar, right-click the title bar. The custom window drop-down menu opens.
2. Select Live Video from the drop-down menu.
3. Drag the DX8000 recorder or one of its cameras to the window, the video from that camera appears.
4. Click the gadget selector button at the left end of the custom window control bar, and then select the DX8000 DVR from the drop-down list.



The gadget for the DVR displays in the control bar, to the right of the gadget selector button. The gadget displays the current date and time, and an indication that the video is live.

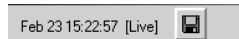


Figure 49. DX8000 Gadget for Live Video

Capturing Live Video

The DX8000 gadget provides a Capture and Save Image button that allows you to capture an image of the video displayed in the window. Images are saved in JPEG file format.

To capture a live video image complete the following steps:



1. Click the Capture and Save Image button. The Save JPEG As dialog box opens.
2. Browse to the desired folder and type in a file name.
3. Click Save. The image file is saved and the Save JPEG As dialog box closes.

WORKING WITH ARCHIVED VIDEO

To switch a custom window to view archived video through the DX8000, complete the following steps:

1. Click the custom window you want to view video in and press Alt-Space Bar. Or, if the window has a Windows title bar, right-click the title bar. The custom window drop-down menu opens.
2. Select Archived Video from the drop-down menu. If a camera is currently switched to the window and the camera is connected to more than one archiving device, a drop-down list of archiving devices opens; select the desired DX8000 DVR from the list.

The DX8000 gadget appears in the window's control bar. A description of the tools available in the DX8000 gadget is provided in the following section.

If there is archived video for the currently switched camera, the archived video from that camera appears. VMX300(-E) cues the video to the date/time selected in the window's Event Picker if one is selected; otherwise, VMX300(-E) cues the video at or near the current time.

For instructions on locating archived video, refer *Working with Archived Video in the Controlling a DX9000 Series DVR* section, which can be found in subsequent pages.

DX8000 Gadget for Archived Video

When the custom window is in Archived Video mode, the DX8000 canvas gadget provides the tools described below. The date and time of the recorded video appears at the left of the gadget.



Figure 50. DX8000 Gadget for Archived Video



Previous Track/Clip: This tool is reserved for future development.

Fast Rewind: This tool is reserved for future development.

Skip Back 10 Seconds: This tool is reserved for future development.

Previous Frame: Click this button to skip the video to the previous frame.

Play Backwards: Click this button to play the video backwards.

Stop: Click this button to stop the video.

Play: Click this button to play the video.

Pause: Click this button to pause the video.

Next Frame: Click this button to skip to the next frame.

Skip Forward 10 Seconds: This tool is reserved for future development.

Fast Forward: This tool is reserved for future development.

Next Track/Clip: This tool is reserved for future development.

Capture and Save button: The Capture and Save button allows you to take a snapshot of the video displayed in the window and save the image as a JPEG file.

Export Specified Time Range: Click this button to copy the video for a specific time range to a file. The maximum you can export at one time is 5 minutes of video.

Video Export to AVI: Click this button to start copying the currently playing video to an AVI file. Click again to stop copying the video and specify a file name and location. The video is transferred from the recorder after the button is pressed the second time. Since the file is created after the transfer is complete, the file may not appear immediately. The maximum you can export at one time is 5 minutes of video.

Instant Record: Click this button to start recording, overriding the record mode, if necessary. Click again to stop recording. If record mode is Normal, this button has no effect. If you stop the instant recording when the record mode requires recording (e.g. motion has been detected and the record mode is Motion), recording will continue.

Saving Video to CD

1. Drag the desired camera or recorder to a custom window.
2. Click the Gadgets button.
3. Select the DX8000 gadget from the drop-down list.
4. Export the desired video to an AVI file on your hard drive using either of the tools provided by the DX8000 canvas gadget in Archived Video mode:



Export Specified Time Range



Video Export to AVI

5. Use the Roxio Easy CD Creator, which is provided on the VMX300(-E) workstation, to copy the AVI file to CD.

CONTROLLING A DX9000 SERIES DVR

You can view live video from a camera that is connected, either directly or through one or more other devices, to a DX9000 Series DVR. To view live video in a custom window, the window must be in Live Video mode. There are no DVR controls available in a custom window when it is being used to view live video.

You can view archived video from a DX9000 DVR in a custom window that is in Archived Video mode. The DX9000 gadget provides tools for controlling the DVR when viewing archived video.

NOTE: You can control cameras, but not DVRs, from a custom window that is in Live Video mode. You can control DVRs, but not cameras, from a custom window that is in Archived Video mode.

Troubleshooting: How to Connect to the DX9000 Series DVR Server from the VMX300(-E)

If the system administrator changed the VMX300(-E) operating system password, system operators must complete a connection procedure to connect to the DVR server. Your system administrator will provide you with this procedure. If the password was not changed, you can view video as described in the *Viewing Live Video* and *Working with Archived Video* sections.

VIEWING LIVE VIDEO

When viewing live video from a camera that is connected to a DX9000 DVR, whether the camera is connected directly to the DVR or through one or more other devices, you can only view the video. You cannot control the camera or the DVR.

You can simultaneously view live video in one custom window and archived video in another custom window. Suppose you have two custom windows open, one of which is in Live Video mode and the other in Archived Video mode. If you have switched a camera that is connected to a DX9000 DVR to both windows, you can view live video in the Live Video window at the same time as you view archived video and control the DVR in the other window.

1. Click the custom window you want to view video in and press Alt-Space Bar. Alternatively, if the window has a Windows title bar, right-click the title bar. The custom window drop-down menu opens.
2. Select Live Video from the drop-down menu. If a camera is currently switched to the window, the video from that camera appears.

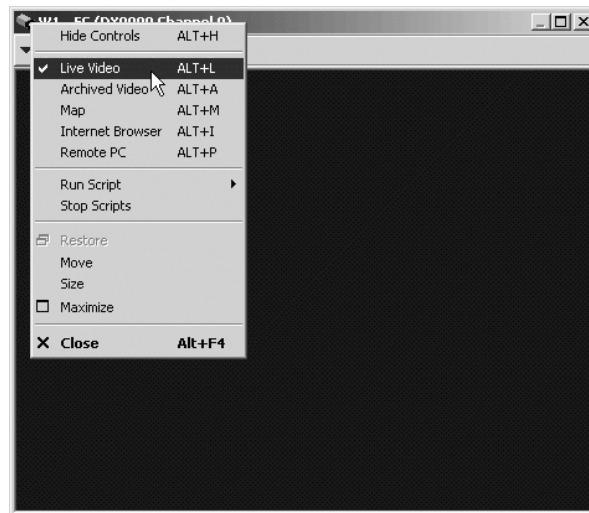


Figure 51. Selecting Live Video

3. If necessary, switch a (different) camera to the custom window. To switch a camera, drag the camera to the custom window either from a map or from the Device List. The video from that camera appears in the window's display area.

TIP: VMX300(-E) provides keyboard shortcuts to select the content type for a custom window. To select live video, click the custom window and press Alt-L.

NOTE: If you switch a DX9000 DVR to a custom window when Live Video is selected, No Live Sources appears in the window's title bar (if it has one). No video appears in the window. Drag a camera to the window to view video.

View the DX9000 DVR Gadget for Live Video

When viewing live video, the DX9000 gadget displays the current date and time. The gadget does not provide any tools for controlling the DVR in Live Video mode.



Click the gadget selector button at the left end of the custom window control bar and select the DX9000 DVR from the drop-down list.

The gadget for the DVR will display in the control bar, to the right of the gadget selector button. The gadget displays the current date and time, and an indication that the video is live.

Oct 17 2003 10:50:54 [Live]

Figure 52. DX9000 Gadget - Live Video

WORKING WITH ARCHIVED VIDEO

To control a DX9000 DVR, you must belong to, and be logged in under, a user group that grants you the necessary privileges. Your system administrator should instruct you in what privileges you have.

NOTE: To access DX9000 DVR controls, the DX9000 driver must be running. If the DX9000 DVR icons appear as a hollow outline, notify your system administrator that the device driver is not running.

Selecting Archived Video

1. Click the custom window you want to view video in and press Alt-Space Bar. Alternatively, if the window has a Windows title bar, right-click the title bar. The custom window drop-down menu opens.
2. Select Archived Video from the drop-down menu. If a camera is currently switched to the window and the camera is connected to more than one archiving device, a drop-down list of archiving devices opens; select the desired DX9000 DVR from the list.

The DX9000 gadget appears in the window's control bar. If there is archived video for the currently switched camera, the archived video from that camera appears. VMX300(-E) cues the video to the date/time selected in the window's Event Picker if one is selected; otherwise, VMX300(-E) cues the video at or near the current time.

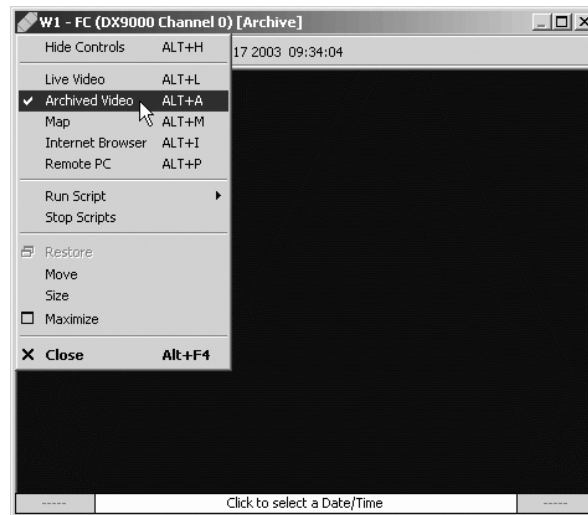


Figure 53. Selecting Archived Video

TIP: VMX300(-E) provides keyboard shortcuts to select the content type for a custom window. To select Archived Video, click the custom window and press Alt-A. If the currently switched camera is connected to more than one archiving device, VMX300(-E) automatically selects one.

Locating Archived Video

There are two common approaches to locating archived video:

- **Using the date/time and an archived alarm or event:** The video you want to view coincided with an alarm or event, and you know the approximate date/time of the alarm or event. For example, you might want to view the video recorded when a door alarm was triggered. In this scenario, you use an estimate of the date/time to locate the alarm or event in the Session Manager, then drag the alarm or event from the Session Manager to the custom window to copy the selection to the window. You can only use this approach if the alarm or event is archived.
- **Using the date/time only:** You know the approximate date/time of the video you want to view, but there is no corresponding alarm or event archived. In this scenario, you use the Event Picker in the custom window to zero in on the date/time as closely as you can, then you browse to locate the desired archives.

These approaches are described in the following section.

Locating Archived Video via the Date/Time Only

Follow this approach when you know the approximate date/time of the video you want to view, but there is no corresponding archived alarm or event.

1. Select Archived Video for the custom window you want to view the video in. Refer to *Selecting Archived Video* for instructions.
2. Use the custom window's Event Picker to select a date/time as close to the date/time of the archive as possible, either by building a date/time from the year down, or by zooming to a time unit. Refer to the *Event Picker - Building a Date/Time* and *Zooming to a Time Unit* sections for instructions. The selected date/time appears in the bottom row of the Event Picker.
3. Click the date/time in the bottom row of the custom window's Event Picker. If a camera is switched to the window, VMX300(-E) loads and plays the archived video for that camera, cued to the date/time selected in the Event Picker.



Figure 54. Locating Archived Video

4. If desired, switch a (different) camera to the custom window. To switch a camera, drag the camera to the custom window either from a map or from the Device List. The gadget for the archiving device the camera is connected to appears in the window's control bar. If there is archived video for that camera, it loads and plays in the window's display area, cued to the date/time selected in the Event Picker.



Figure 55. Viewing Archived Video



TIPS:

- If you know which camera the desired video originated from, you can switch the camera to the custom window before selecting a date/time in the Event Picker. If the camera is already switched to the window, you do not need to switch it again. If you do not know which camera the video originated from, first select the date/time, then switch different cameras to the window successively until you find the one you want.
- If your installation has multiple cameras and you have more than one custom window to view video in, you can play back synchronized archived video from several cameras simultaneously. Drag a different camera to each custom window and select the desired date/time in each window's Event Picker. There will be a delay between windows equivalent to the length of time it took you to drag the next camera to its window.
- You can track a moving object, such as a person or vehicle, in a single custom window by successively dragging adjacent cameras to the window. Suppose the object moves across the range of Camera 1 to within the range of Camera 2. First, set the cursor mode to Synchronized, as described in *Controlling a DX9000 DVR - Playing Archived Video*. Now, drag Camera 1 to the window and start the video playing at the desired time. When the object leaves the range of Camera 1, drag Camera 2 to the window. The video from Camera 2 will automatically cue to the Event Picker time, which is synchronized with the playback time, picking up where the Camera 1 video left off.

NOTES:

- If you attempt to load archived video from a date/time and camera for which no archived video exists, "No Video Found" appears in the custom window control bar.
- DX9000 DVRs overwrite old archives when they run out of recording space. If you try to view old video that has been overwritten, "No Video Found" appears in the custom window's control bar. Note that VMX300(-E) does not delete archived alarms and events when the DX9000 DVR overwrites the video. Archived alarms and events for the selected date/time still exist, even though the video for that date/time has been overwritten.
- DX9000 DVRs can be configured to start recording when motion is detected, according to a schedule, or in response to a device-internal alarm.

If you attempt to load archived video and it fails because no video was found, it could be for the following reasons:

- The DVR is configured to record when motion is detected. No motion was detected on the switched camera at the date/time you selected in the Event Picker, so the DVR was not recording at that time.
- The DVR is configured to record at scheduled times. The DVR was not scheduled to be recording video from the switched camera at the date/time you selected in the Event Picker.
- The DVR is configured to record when a DVR-internal alarm is triggered. No alarm was triggered, so the DVR was not recording video from the switched camera at the selected date/time.

Locating Archived Video via an Archived Alarm or Event

Follow this approach when the video you want to view coincided with an alarm or event, and you know the approximate date/time of the alarm or event. In this scenario, you use an estimate of the date/time to locate the alarm or event in the Session Manager, then drag the alarm or event from the Session Manager to the custom window to copy the selection to the window. You can only use this approach if the alarm or event is archived.

1. If necessary, open the Session Manager by selecting Session Manager from the View menu.
2. Click the Archive View button on the Session Manager tool bar to go into Archive View. The Event Picker appears at the bottom of the Session Manager window, with an area for listing archived alarms and events above it.
3. Use the Session Manager's Event Picker to select a date/time as close to the date/time of the alarm or event as possible, either by building a date/time from the year down, or by zooming to a time unit. Refer to the *Event Picker - Building a Date/Time* and *Zooming to a Time Unit* sections for instructions. The selected date/time appears in the bottom row of the Event Picker.

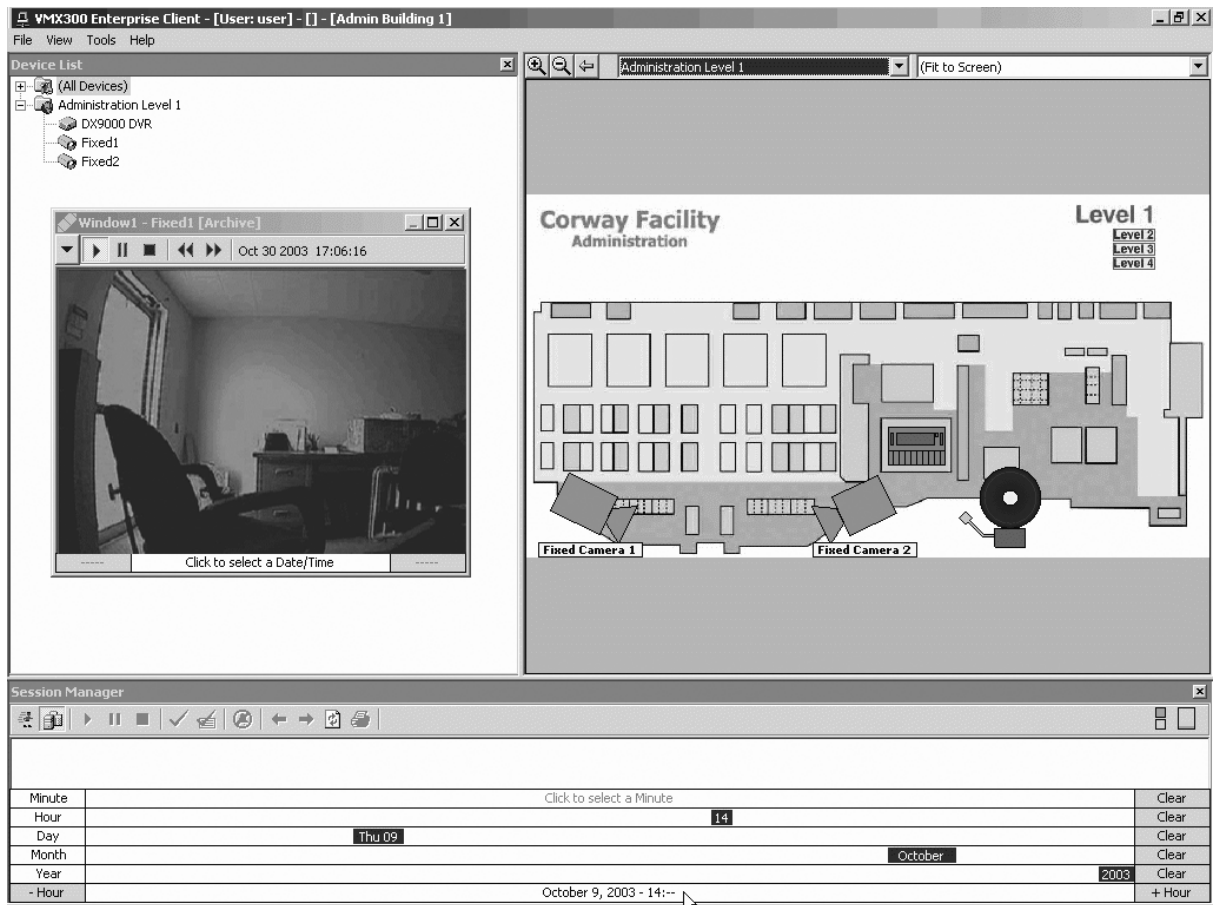


Figure 56. Using an Alarm or Event to Locate Archived Video

4. Click the date/time in the bottom row of the Session Manager's Event Picker. A list of the retrieved alarms and events appears in the Session Manager window, above the Event Picker. As well, each archived alarm or event is represented as a small vertical bar in the Event Picker's Event Row. Each entry in the list is colored the same as the corresponding bar in the Event row.

Only the alarms and events for the selected time period are retrieved. For example, if you specified a date/time down to the hour, only the archived alarms and events for that hour appear.

5. Locate the alarm or event by browsing or filtering the archives. Refer to *Event Picker* for instructions.
6. Drag the alarm or event from the list in the Session Manager to the custom window's display area. The custom window's Event Picker acquires the same selection as the Session Manager's Event Picker, including the date/time range and the alarm or event selected.

If the system administrator has associated the alarm or event with a camera, VMX300(-E) switches the camera to the window and retrieves its archived video, cued to the date/time of the alarm or event. For example, the system administrator might associate a door alarm with a

camera that points at the door. When you drag the archived alarm from the Session Manager to the custom window, the video from the camera that points at the door loads and plays, cued to the time of the alarm.

If the system administrator has not associated a camera with the alarm or event and a camera is switched to the window, VMX300(-E) loads and plays the archived video for the currently switched camera, cued to the date/time of the dragged alarm or event.

7. If desired, switch a (different) camera to the custom window. To switch a camera, drag the camera to the custom window either from a map or from the Device List. The gadget for the archiving device the camera is connected to appears in the window's control bar. If there is archived video for that camera, it loads and plays in the window's display area, cued to the date/time selected in the Event Picker.

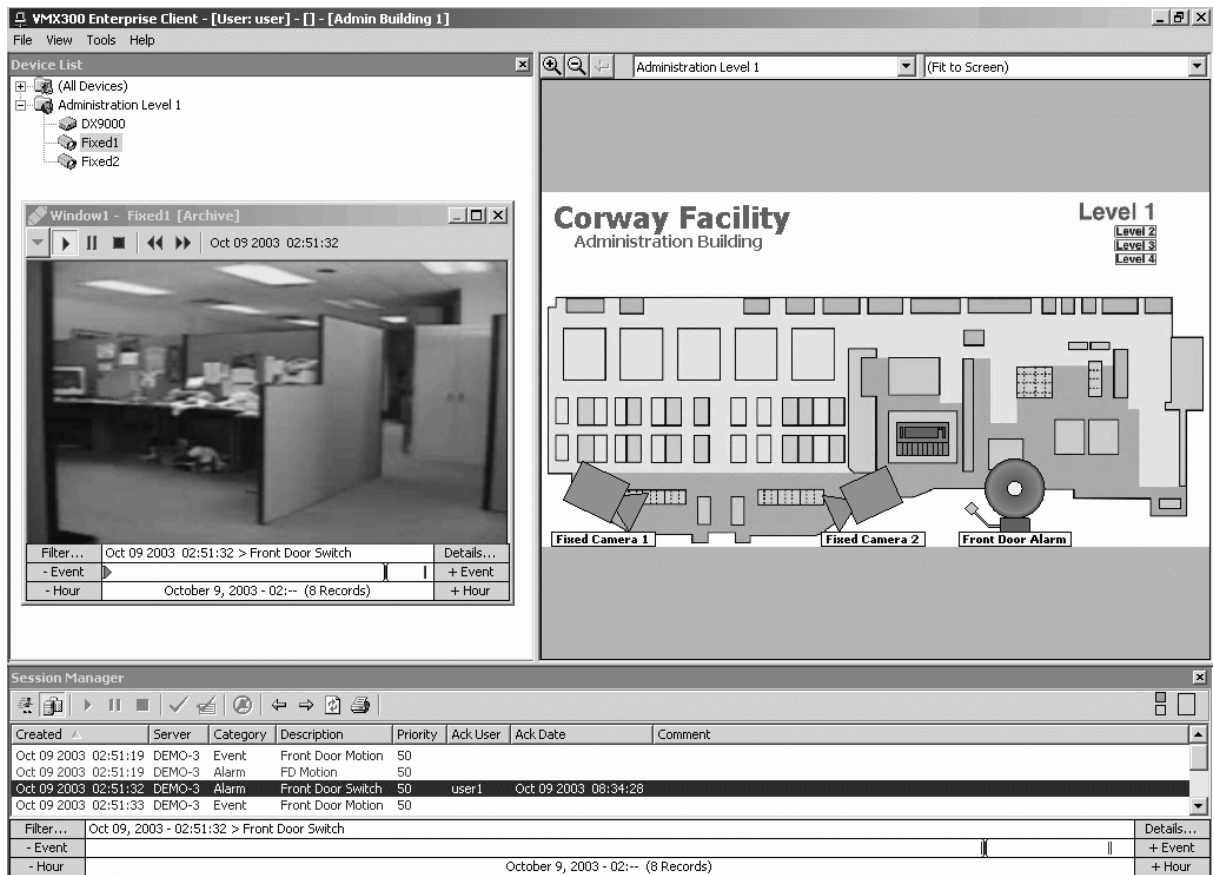


Figure 57. Using an Alarm or Event to Locate Archived Video



TIPS:

- If you know which camera the desired video originated from, you can switch the camera to the custom window before locating the alarm or event. If the camera is already switched to the window, you do not need to switch it again. If you do not know which camera the video originated from, first locate the alarm or event and drag it to the window, then switch different cameras to the window successively until you find the one you want.
- You can prevent VMX300(-E) from automatically loading the video associated with an alarm or event by dragging the alarm or event to the custom window's Event Picker instead of to the custom window's display area.
- If your installation has multiple cameras and you have more than one custom window to view video in, you can play back synchronized archived video from several cameras simultaneously. Select the desired date/time in each window's Event Picker. Drag a different camera to each custom window. There will be a delay between windows equivalent to the length of time it took you to drag the next camera to its window.
- You can track a moving object, such as a person or vehicle, in a single custom window by successively dragging adjacent cameras to the window. Suppose the object moves across the range of Camera 1 to within the range of Camera 2. First, set the cursor mode to Synchronized, as described in *Controlling a DX9000 DVR - Playing Archived Video*. Now, drag Camera 1 to the window and start the video playing at the desired time. When the object leaves the range of Camera 1, drag Camera 2 to the window. The video from Camera 2 automatically cues to the Event Picker time, which is synchronized with the playback time, picking up where the Camera 1 video left off.

NOTES:

- If you select a date/time and camera for which no archived video exists, “No Video Found” appears in the custom window control bar.
- DX9000 DVRs overwrite old archives when they run out of recording space. If you try to view old video that has been overwritten, “No Video Found” appears in the custom window’s control bar. Note that VMX300(-E) does not delete archived alarms and events when the DX9000 DVR overwrites the video. Archived alarms and events for the selected date/time still exist, even though the video for that date/time has been overwritten.
- DX9000 DVRs can be configured to start recording when motion is detected, according to a schedule, or in response to a device-internal alarm.

If you attempt to load archived video and it fails because no video was found, it could be for the following reasons:

- The DVR is configured to record when motion is detected. No motion was detected on the switched camera at the date/time you selected in the Event Picker, so the DVR was not recording at that time.
- The DVR is configured to record at scheduled times. The DVR was not scheduled to be recording video from the switched camera at the date/time you selected in the Event Picker.
- The DVR is configured to record when a DVR-internal alarm is triggered. No alarm was triggered, so the DVR was not recording video from the switched camera at the selected date/time.

Controlling a DX9000 DVR

DX9000 DVR controls are available through the DX9000 gadget. The gadget displays in the custom window control bar when Archived Video is selected for the window.

You can simultaneously view archived video in one custom window and live video in another custom window. Suppose you have two custom windows open, one of which is in Archived Video mode and the other in Live Video mode. If you have switched a camera that is connected to a DX9000 DVR to both windows, you can view archived video and control the DVR in the Archived Video window at the same time as you view live video in the other window.

DX9000 DVR Gadget for Archived Video

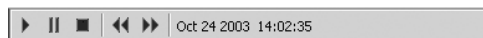


Figure 58. DX9000 Gadget - Archived Video

The gadget provides the following tools to control the DX9000 DVR:

- **Play:** Play the selected video.
- **Pause:** Pause playing video. Click the Pause button again to resume playing.
- **Stop:** Stop playing video and unload it from the custom window.
- **Rewind:** Rewind the video 10 seconds.
- **Fast forward:** Advance the video 10 seconds.
- **Date and time:** Indicates the playback date and time of the currently playing video.

Playing Archived Video



Archived video automatically starts playing when it is loaded into a custom window. If a date/time is selected in the Event Picker, the video is cued to that date/time. If no date/time is selected, the video is cued at or near the current date/time. If you have stopped or paused the video, you can resume it by clicking the Play button in the custom window control bar.

While archived video is playing, the green arrow in the Event Picker advances across the Event row. The playback time in the window’s control bar displays the date/time of the video that is currently playing, to the second. The Event Picker time displayed in the top row of the Event Picker depends on the cursor mode selected:

- **Independent:** When Independent cursor mode is selected, the Event Picker time remains fixed at the original date/time you selected, independent of the playback time.
- **Auto select:** When Auto Select cursor mode is selected, the Event Picker time advances whenever the playback time coincides with an archived alarm or event. Thus the Event Picker time always shows the date/time of the most recently passed alarm or event.
- **Synchronized:** When Synchronized cursor mode is selected, the Event Picker time advances in step with the playback time.

To set the cursor mode, right-click the custom window Event Picker and select the desired mode from the pop-up menu.

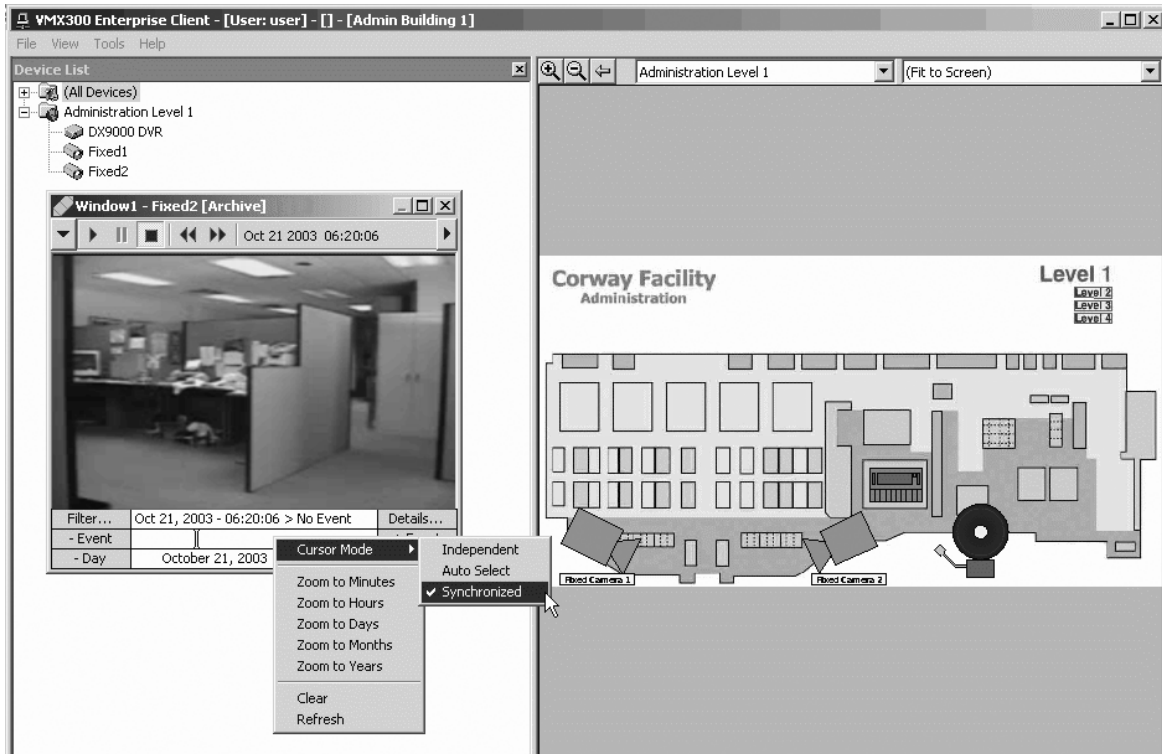


Figure 59. Selecting Cursor Mode

TIP: Use Synchronized cursor mode to track a moving object, such as a person or vehicle, in a single custom window. Suppose the object moves across the range of Camera 1 to within the range of Camera 2. First, set the cursor mode to Synchronized. Now, drag Camera 1 to the window and start the video playing at the desired time. When the object leaves the range of Camera 1, drag Camera 2 to the window. The video from Camera 2 automatically cues to the Event Picker time, which is synchronized with the playback time, picking up where the Camera 1 video left off.


Pausing Archived Video

 To pause archived video, click the Pause button in the custom window control bar. Click the Pause button again to resume playing at the date/time it was paused. The playback time blinks when video is paused.


Stopping Archived Video

 To stop archived video, click the Stop button on the custom window control bar. The video is unloaded from the window when it is stopped. To resume playing the video, click the Play button.

Rewinding Archived Video

 To rewind archived video by 10 seconds, click the Rewind button on the custom window control bar. You can also rewind by dragging the picker to the left, or by selecting an earlier date/time in the Event Picker. Refer to *Event Picker* for more information.

Advancing Archived Video

 To advance archived video by 10 seconds, click the Fast Forward button on the custom window control bar. You can also advance the video by dragging the picker to the right, or by selecting a later date/time in the Event Picker. Refer to *Event Picker* for more information.

CONTROLLING AN ASCII SWITCHER

The Pelco ASCII device driver is intended to control cameras routed through a Pelco matrix switcher using the Pelco ASCII protocol.

To control a particular switcher, you must belong to, and be logged in under, a user group that grants you the necessary privileges. Your system administrator should instruct you in what privileges you have.

NOTE: To access ASCII switcher controls, the Pelco ASCII device driver must be running. Switcher icons appear as a hollow outline when the device driver is not running. If you try to open the Device Control dialog box when the driver is not running, you will get a connection error. Notify your system administrator if the driver is not running.

ASCII SWITCHER GADGET



Figure 60. ASCII Switcher Gadget

The switcher gadget has two parts:

- **Device control button:** The Device Control button opens the switcher's Device Control dialog box.
- **Communications status:** Comm Status indicates whether the switcher is currently online or offline.

OPENING THE SWITCHER'S DEVICE CONTROL DIALOG BOX

Switcher controls are available through the switcher's Device Control dialog box. To access the Device Control dialog box, you must belong to, and log in under, a user group that allows you to access the Device Control dialog box.

Open the Device Control dialog box for an ASCII switcher using one of the following methods:

- Double-click the switcher's icon on a map.
- Double-click the switcher in the Device List.
- Right-click the switcher in the Device List and then click Show Control Dialog from the pop-up menu.
- Open the switcher's gadget and click the Device Control button.

DATE\TIME TAB

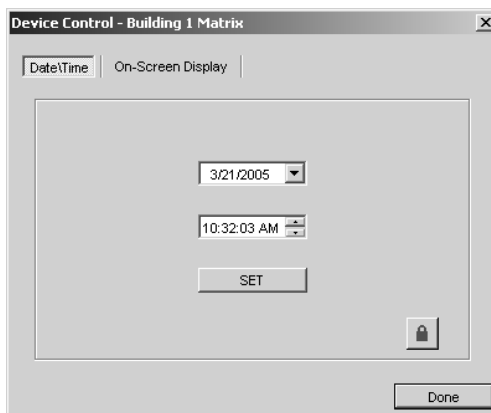


Figure 61. Device Control Dialog Box - Date\Time Tab

The Date\Time tab allows you to manually set the switcher's date/time, which displays optionally when you view live video.

To set the switcher's date and time:

1. **Date:** Click the month and type the new month. Repeat for the day and year, as required. Single-digit months and days do not require a leading zero. Alternatively, click the arrow to the right of the date box to open a drop-down calendar. Use the left and right arrows in the calendar to select the year and month, then click a day to select it. Today's date is circled in red.

2. **Time:** Click the hour and either type the new hour or click the up and down arrows at the right of the box to advance the time or set it back. Repeat for the minutes and seconds, as required. You do not need to type leading zeros in single-digit hours, minutes or seconds.
3. **Set:** To have the date and time you entered come into effect, click Set.

ON-SCREEN DISPLAY

The On-Screen Display tab of the switcher's Device Control dialog box allows you to display the switcher's on-screen menu on the active destination device or custom window. The options presented in the on-screen display depend on the switcher model. In general, arrow keys are used for menu navigation and selection of menu options. The numeric keys are used for entering the password. Refer to the Pelco switcher documentation for information on specific options.

To display the switcher's on-screen menu:

1. Open the switcher's Device Control dialog box and go to the On-Screen Display tab.

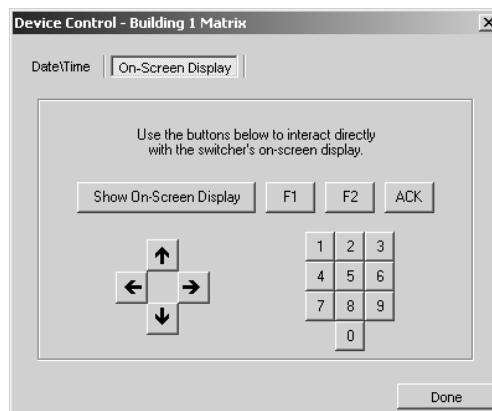


Figure 62. Device Control Dialog Box - On-Screen Display Tab

2. Click Show On-Screen Display.

If the switcher requires a password, you are prompted to enter the password before the on-screen display opens. The on-screen menu appears in the active destination device or custom window. Refer to the Pelco switcher documentation for information on navigating the menu, selecting options and exiting the on-screen display.



Figure 63. Sample On-Screen Display

NOTE: Having the on-screen display open interferes with camera control. The cameras cannot be controlled by any user when the on-screen display is open. Control returns when the on-screen display is closed.

CONTROLLING AN ASCII CAMERA

NOTE: Fixed cameras are not controllable. This section applies to controllable cameras only.

To control a particular camera, you must belong to, and be logged in under, a user group that grants you the necessary privileges. Your system administrator should instruct you in what privileges you have.

Before you can control a camera, you must switch the camera to a destination device, such as a custom window or external monitor. To switch the camera, drag the camera to the destination device. You can drag from/to device icons placed on maps or devices listed in the Device List. Refer to *Devices - Switching a Device* for more information on switching devices.

All ASCII camera controls are available through the camera's Device Control dialog box. Some controls are also available in the camera's gadget (go to a preset, run a pattern) or in the custom window display area (pan, tilt, zoom, iris, focus).

You cannot control an ASCII camera if it is locked by another user or by a script. If you attempt to control a locked camera, VMX300(-E) displays a message saying the camera is locked and identifying who placed the lock. For more information, refer to *Locking a Camera*.

NOTE: To access ASCII camera controls, the Pelco ASCII device driver must be running. Device icons appear as a hollow outline when the device driver is not running. If you try to open the Device Control dialog box when the driver is not running, you will get a connection error. Notify your system administrator if the driver is not running.

ASCII CAMERA GADGET



Figure 64. ASCII Camera Gadget

The camera gadget has four parts:



- **Device control button:** The Device Control button opens the camera's Device Control dialog box.
- **Presets drop-down list:** The Presets drop-down list lists the user-defined presets for that camera. Click a preset to make the camera go to the preset. If the camera's current view is not the result of going to a preset, <Custom View> appears in the drop-down list. Refer to *Presets* for more information.
- **Patterns drop-down list:** The Patterns drop-down list lists the user-defined patterns for that camera. Click a pattern to make the camera run the pattern. The camera will run the pattern repeatedly until it receives a new movement command. If the camera is not currently running a pattern, <No Pattern> appears in the drop-down list. Refer to *Patterns* for more information.



- **Lock button:** The Lock button allows you to take exclusive control of the camera. Click the Lock button to prevent a script or another operator from controlling the camera. Refer to *Locking a Camera* for more information.

OPENING THE CAMERA'S DEVICE CONTROL DIALOG BOX

To access the camera's Device Control dialog box, you must belong to, and log in under, a user group that allows you to access the Device Control dialog box.

Open the Device Control dialog box for an ASCII camera using one of the following methods:

- Double-click the camera's icon on a map.
- Double-click the switcher in the Device List.
- Right-click the camera in the Device List, and then click Show Control Dialog from the pop-up menu.
- Open the camera's gadget and click the Device Control button.

PAN, TILT, ZOOM, IRIS, AND FOCUS

VMX300(-E) provides both mouse and keyboard controls for panning, tilting, zooming, focusing, and adjusting the iris of ASCII cameras that support pan/tilt/zoom functionality. Your administrator should instruct you in which cameras support pan/tilt/zoom.

Mouse Controls

You can control a camera from a custom window or from the Device Control dialog box:

- **Custom window:** To pan and tilt, click the custom window's display area in the direction you want to move the camera. For example, to pan and tilt up and to the left, click above and to the left of the center of the display area. Use the mouse wheel as described in Table G to zoom, focus, and adjust the iris.
- **Device control dialog box:** The square on the Control tab functions as a control pad. The dot in the center of the control pad represents the current camera position. Click the control pad in the direction you want to pan and tilt the camera. For example, to pan and tilt down and to the right, click below and to the right of the dot. Use the mouse wheel as described in Table G to zoom, focus, and adjust the iris.

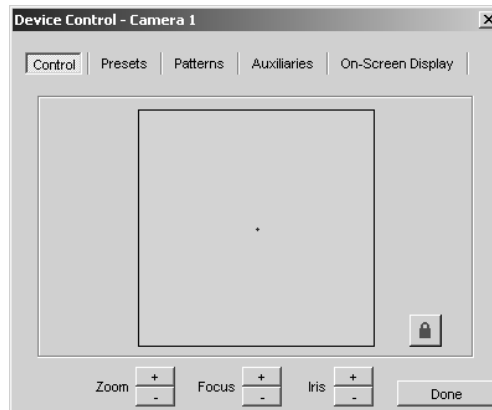


Figure 65. Device Control Dialog Box - Control Tab

Table G. Mouse Controls

CAMERA CONTROL	MOUSE ACTION
Pan left	Click to the left of center.
Pan right	Click to the right of center.
Tilt up	Click above the center.
Tilt down	Click below the center.
Zoom in	Turn the mouse wheel away from you.
Zoom out	Turn the mouse wheel toward you.
Close iris	Hold the Alt key depressed and turn the mouse wheel away from you.
Open iris	Hold the Alt key depressed and turn the mouse wheel toward you.
Focus out	Hold the Shift key depressed and turn the mouse wheel away from you.
Focus in	Hold the Shift key depressed and turn the mouse wheel toward you.

To pan and tilt the camera incrementally, click once. Clicking close to the center moves the camera in small increments. The further away from the center you click, the larger the increments the camera moves.

To pan and tilt the camera continuously, click and hold the mouse button depressed. Clicking close to the center moves the camera slowly. The further away from the center you click, the faster the camera moves. Release the mouse button to stop panning and tilting.

To zoom, focus, or adjust the iris incrementally, turn the mouse wheel one click. To zoom, focus, or adjust the iris continuously, turn the mouse wheel continuously.

Keyboard Controls

Keyboard controls work only in custom windows. They do not work in the Device Control dialog box. To use keyboard controls in a custom window, click the window's display area to make it active, then use keyboard controls as desired.

Table H lists the keyboard controls for panning, tilting, zooming, focusing, and adjusting the iris of ASCII cameras.

Table H. Keyboard Controls

CONTROL	KEYSTROKE	DESCRIPTION
Pan left	←	Left Arrow key
Pan right	→	Right Arrow key
Tilt up	↑	Up Arrow key
Tilt down	↓	Down Arrow key
Pan and tilt up and to the right	Pg Up	Page Up key on numeric keypad
Pan and tilt down and to the right	Pg Dn	Page Down key on numeric keypad
Pan and tilt up and to the left	Home	Home key on numeric keypad
Pan and tilt down and to the left	End	End key on numeric keypad
Zoom in	+	Plus key on numeric keypad
Zoom out	-	Minus key on numeric keypad
Open iris	Alt +	Hold Alt key depressed and press plus key on numeric keypad
Close iris	Alt -	Hold Alt key depressed and press minus key on numeric keypad
Focus out	Shift +	Hold Shift key depressed and press plus key on numeric keypad
Focus in	Shift -	Hold Shift key depressed and press minus key on numeric keypad

NOTE: To use navigation keys on the numeric keypad, Num Lock must be off.

PRESETS

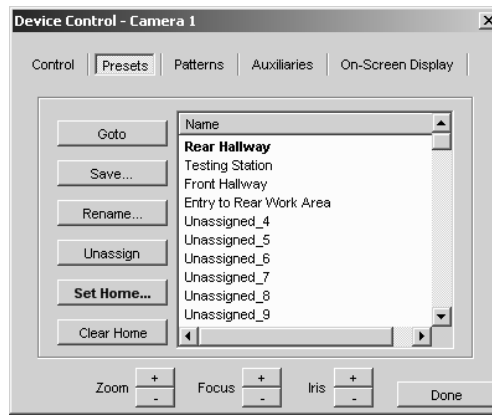


Figure 66. Device Control Dialog Box - Presets Tab

A preset is a predefined camera position that is stored in the camera. Each camera can have a limited number of presets defined for it. The maximum number of presets depends on the camera model.

The Presets tab of the Device Control dialog box lists the presets for the camera. Presets can appear in the list as Unassigned_*i*, where *i* is the preset's number. "Unassigned" indicates that the preset has not been assigned a name and script tag in VMX300(-E).

To determine whether an unassigned preset has a camera position stored for it, click the preset, and then click Goto. If the camera moves as a result, there is a stored camera position.

Assigning a preset does the following:

- It makes the preset name appear in the presets drop-down list in the camera's gadget.
- It gives the preset a script tag so scripts defined by the system administrator can refer to the preset.

You can assign a preset in two ways:

- **Save:** By saving the preset. Saving a preset saves the camera position, focus setting, name, and script tag. Refer to *Creating a Preset* for instructions on saving a preset to an unassigned preset number. Refer to *Editing a Preset* for instructions on saving a preset to a preset number that is already assigned.
- **Rename:** By renaming the preset. Renaming a preset saves the name and script tag, but does not affect the camera position stored for the preset. Refer to *Renaming a Preset* for information on renaming presets.

For information on presets defined in the camera, refer to the camera documentation.

NOTE: Since presets are associated with a camera, rather than a user, any changes you make to a camera's presets affect all users with permission to access the presets.

TIP: The order of the list on the Presets tab is retained in the presets drop-down list in the gadget. This allows you to define presets in the order you want them to appear in the drop-down list.

Going to a Preset

To make a camera go to a preset, you must belong to, and log in under, a user group that allows you to control that camera.

VMX300(-E) provides two methods of going to a preset:

- **Custom window:** Select the preset you want the camera to go to from the presets drop-down list in the camera's gadget. Note: the presets drop-down list only lists presets that have been assigned a name and script tag through the Presets tab. To go to an unassigned preset, you must use the Presets tab in the Device Control dialog box.
- **Device control dialog box:** On the Presets tab for the desired camera, select the preset you want the camera to go to from the list and click Goto.

TIP: Use the Goto option on the Presets tab to test whether an unassigned preset has a camera position associated with it, by selecting the preset and clicking Goto. If the camera moves as a result, there is a stored camera position.

Creating a Preset

Creating a preset refers to saving a preset to an unassigned preset number. For instructions on saving a preset to a preset number that has previously been assigned, refer to *Editing a Preset*.

To create a preset for an ASCII camera, you must belong to, and log in under, a user group that allows you to edit the presets for that camera. When you create a preset, it becomes available to all users who have permission to control the camera.

The Save option used to create a preset saves the camera position, preset name, and script tag. If a camera position is already stored for that preset number, the stored camera position is replaced by the new one.

To determine whether an unassigned preset number has a camera position stored for it, click the preset in the Presets tab, and then click Goto. If the camera moves as result, there is a camera position stored for the selected preset number. To assign a name and script tag while retaining the stored camera position, use the Rename option described in *Renaming a Preset*.

To create a preset:

1. Pan, tilt and zoom the camera until the desired view is showing.
2. Open the Device Control dialog box for the desired camera and go to the Presets tab.
3. You can click one of the unassigned preset numbers (Unassigned_i) or, if you do not select an unassigned number, the new preset will be created in the next available unassigned position. Note: Selecting a preset that is already assigned is discussed in *Editing a Preset*.
4. Click Save. The Add New Preset dialog box opens.



Figure 67. Add New Preset Dialog Box - Presets Tab

5. **Name:** Type a unique name for the preset. Preset names are at most 50 characters long. They can include any letter, digit or special character, with the exception of single and double quotation marks. Preset names are not case sensitive.

A tag resembling the preset name appears in the Script Tag box. If the preset name contains special characters, they are omitted from the tag. Spaces are replaced with underscores. Leading digits are removed.

6. **Script tag:** If you do not want to use the script tag provided by the system, type a unique tag of your choice. Script tags are at most 50 characters long. They can include any letter, digit or the underscore character, but cannot begin with a digit. They cannot contain spaces or special characters. Tags are not case sensitive. The script tag is used by administrators to refer to the preset in scripts.
7. Click OK. The Add New Preset dialog box will close and the name of the new preset will appear in the list of presets. If you selected Unassigned_i in step 3, the new preset appears in the position you selected. If you did not select an unassigned position, the new preset appears in the next available unassigned position in the list.

Editing a Preset

Editing a preset refers to saving a preset to a preset number that is already assigned. For instructions on saving a preset to an unassigned preset number, refer to *Creating a Preset*.

To edit a preset for an ASCII camera, you must belong to, and log in under, a user group that allows you to edit the presets for that camera. When you edit a preset, the changes you make affect other users with permission to access the preset.

The Save option used to edit a preset saves the camera position, preset name, and script tag, replacing the previously defined camera position, preset name, and script tag. To assign a name and script tag while retaining the existing camera position, use the Rename option described in *Renaming a Preset*.

To edit a preset:

1. Pan, tilt and zoom the camera until the desired view is showing.
2. Open the Device Control dialog box for the desired camera and go to the Presets tab.
3. Click the desired preset in the list, and then click Save. The Edit Preset Properties dialog box opens.



Figure 68. Edit Preset Properties Dialog Box

4. Edit the name and script tag, if desired.
5. Click OK. The Edit Preset Properties dialog box closes and the new settings are saved.

Renaming a Preset

Renaming a preset refers to changing the preset's name and/or script tag using the Rename option. For instructions on changing the camera position, refer to *Editing a Preset*.

To rename a preset for an ASCII camera, you must belong to, and log in under, a user group that allows you to edit the presets for that camera. When you rename a preset, the changes you make affect other users with permission to access the preset.

To rename a preset:

1. Open the Device Control dialog box for the desired camera and go to the Presets tab.
2. Select the preset you want to rename from the list of presets.
3. Click Rename. The Edit Preset Properties dialog box opens.
4. Edit the name and script tag as desired, and then click OK. The Edit Preset Properties dialog box closes and your changes are saved.

NOTE: Changing the script tag for a preset that is referred to in a script introduces an error into the script. To correct the error, the system administrator must update the script so it uses the preset's new script tag.

Unassigning a Preset

Unassigning a camera's preset deletes the preset's name and script tag, leaving the camera position stored in the camera intact. When you unassign a preset, the following changes take effect:

- The preset name no longer appears in the presets drop-down list in the camera's gadget.
- Scripts defined by the system administrator can no longer refer to the preset.

To unassign a camera's preset, you must belong to, and log in under, a user group that allows you to edit the presets for that camera.

To unassign a preset:

1. Open the Device Control dialog box for the desired camera and go to the Presets tab.
2. Click the preset, and then click Unassign. The preset's name and script tag are deleted and the preset appears in the list as Unassigned_i. Scripts will no longer be able to refer to the preset, and the preset will no longer be available through the presets drop-down list in the camera's gadget.

NOTE: Unassigning a preset that is referred to in a script introduces an error into the script.

Setting the Camera's Home Preset

A camera's home preset is the preset the camera goes to when it has been idle for a predefined time. The home preset displays in bold print in the Device Control dialog box presets list.

To set a camera's home preset, you must belong to, and log in under, a user group that allows you to edit the presets for that camera.

NOTE: You can define a home preset or a default pattern for a camera, but not both. Setting the home preset clears the default pattern, if there is one.

To set the home preset:

1. Open the Device Control dialog box for the desired camera and go to the Presets tab.
2. Click the preset you want as the home preset, and then click Set Home. The Edit Home Preset dialog box opens.

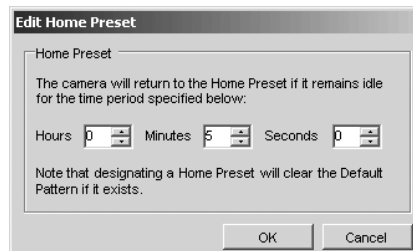


Figure 69. Edit Home Preset Dialog Box

3. Enter the number of hours, minutes, and seconds that you want the camera to be idle before it goes to the home preset position.
4. Click OK. The Edit Home Preset dialog box closes. The selected preset becomes the home preset, replacing the previous home preset or default pattern if there was one. The new home preset appears in bold print in the list.

Clearing the Camera's Home Preset

To clear a camera's home preset, you must belong to, and log in under, a user group that allows you to edit the presets for that camera.

To clear the home preset:

1. Open the Device Control dialog box for the desired camera and go to the Presets tab.
2. Click the home preset from the list of presets, and then click Clear Home. The selected preset no longer appears in bold print in the list. The camera has no home preset.

PATTERNS

A pattern is a user-defined set of camera movements and iris/focus adjustments that is stored in the camera. Each camera can have a limited number of patterns defined for it. The maximum number of patterns depends on the camera model.

The Patterns tab of the Device Control dialog box lists the patterns for the camera. Patterns can appear in the list as Unassigned_*i*, where *i* is the pattern's number. "Unassigned" indicates that the pattern has not been assigned a name and script tag in VMX300(-E).

To determine whether an unassigned pattern has a camera movement stored for it, select the pattern and click Run. If the camera moves as a result, there is a stored camera movement.

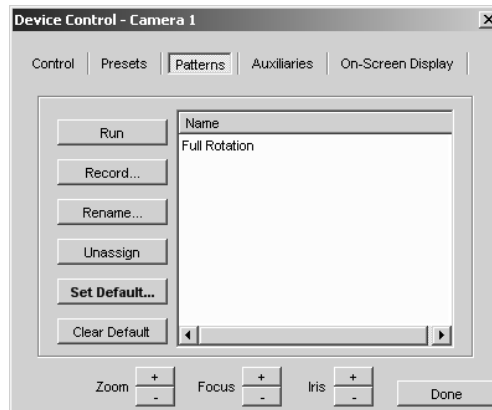


Figure 70. Device Control Dialog Box - Patterns Tab

Assigning a pattern does the following:

- It makes the pattern name appear in the patterns drop-down list in the camera's gadget.
- It gives the pattern a script tag so scripts defined by the system administrator can refer to the pattern.

You can assign a pattern in two ways:

- **Record:** Recording a pattern saves the camera movement, name, and script tag. Refer to *Creating a Pattern* for instructions on recording a pattern and saving it to an unassigned pattern number. Refer to *Editing a Pattern* for instructions on saving a pattern to a pattern number that is already assigned.
- **Rename:** Renaming a pattern saves the name and script tag, but does not affect the camera movement stored for the pattern. Refer to *Renaming a Pattern* for information.

For information on patterns defined in the camera, see the Pelco documentation for the appropriate camera model.

NOTE: Since patterns are associated with a camera, rather than a user, any changes you make to a camera's patterns affect all users with permission to access the pattern.

TIP: The order of the list on the Patterns tab is retained in the patterns drop-down list in the gadget. This allows you to define patterns in the order you want them to appear in the drop-down list.

Running a Pattern

To make a camera run a pattern, you must belong to, and log in under, a user group that allows you to control that camera. When you run a pattern, the pattern runs repeatedly until the camera receives a new movement command. Refer to *Stopping a Pattern* for more information.

VMX300(-E) provides two methods of running a pattern:

- **Custom window:** Select the pattern you want the camera to run from the patterns drop-down list in the camera's gadget. Note: the patterns drop-down list only lists patterns that have been assigned a name and script tag through the Patterns tab. To go to an unassigned pattern, you must use the Patterns tab in the Device Control dialog box.
- **Device control dialog box:** On the Patterns tab for the desired camera, select the pattern you want the camera to run from the list and click Run.

TIP: Use the Run option on the Patterns tab to test whether an unassigned pattern has a camera movement associated with it, by selecting the pattern and clicking Run. If the camera moves as a result, there is a stored camera movement.

Stopping a Pattern

To stop a pattern that a camera is running, you must belong to, and log in under, a user group that allows you to control that camera.

When a pattern is run, the pattern runs repeatedly until it receives a new movement command. Any of the following movement commands will stop a running pattern:

- Pan
- Tilt
- Zoom
- Focus
- Adjust the iris
- Go to a pattern
- Run a (different) pattern

Creating a Pattern

Creating a pattern refers to recording a pattern to an unassigned pattern number. For instructions on saving a pattern to a pattern number that is already assigned, refer to *Editing a Pattern*.

To create a pattern for an ASCII camera, you must belong to, and log in under, a user group that allows you to edit the patterns for that camera. When you create a pattern, it becomes available to all users who have permission to control the camera.

The Record option used to create a pattern saves the camera movement, pattern name, and script tag. If a camera movement is already stored for that pattern number, the stored camera movement will be replaced by the new one.

To determine whether an unassigned pattern number has a camera movement stored for it, select the pattern in the Patterns tab and click Run. If the camera moves as result, there is a camera movement stored for the selected pattern number. To assign a name and script tag while retaining the stored camera movement, use the Rename option described in *Renaming a Pattern*.

1. Open the Device Control dialog box for the desired camera and go to the Patterns tab.
2. If you want, select Unassigned_i for the desired pattern number from the list. If you do not select an unassigned number, the new pattern will be created in the next available unassigned position.
3. Click Record. The Record New Pattern dialog box opens.

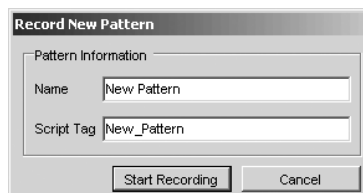


Figure 71. Record New Pattern Dialog Box

4. Type a unique name for the pattern. Pattern names are at most 50 characters long. They can include any letter, digit or special character, with the exception of single and double quotation marks. Pattern names are not case sensitive.
5. Optional: Type a script tag.
6. Click Start Recording. The Start Recording button changes to a Stop Recording button.

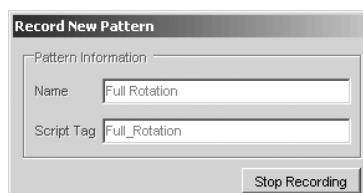


Figure 72. Record New Pattern - Stop Recording

- Pan, tilt, zoom, focus, and adjust the camera's iris as desired.
- Click Stop Recording. The Record New Pattern dialog box closes and the name of the new pattern appears in the list of patterns. If you selected Unassigned_1 in step 2, the new pattern appears in the position you selected. If you did not select a position, the new pattern appears in the next available unassigned position in the list.

Editing a Pattern

Editing a pattern refers to saving a pattern to a pattern number that is already assigned. For instructions on saving a pattern to an unassigned pattern number, refer to *Creating a Pattern*.

To edit a pattern for an ASCII camera, you must belong to, and log in under, a user group that allows you to edit the patterns for that camera. When you edit a pattern, the changes you make affect other users with permission to access the pattern.

The Record option used to edit a pattern saves the camera movement, pattern name, and script tag, replacing the previously defined camera movement, pattern name, and script tag. To assign a name and script tag while retaining the existing camera movement, use the Rename option described in *Renaming a Pattern*.

To edit a pattern:

- Open the Device Control dialog box for the desired camera and go to the Patterns tab.
- Click the desired pattern in the list and then click Record. The Edit Pattern Properties dialog box opens.

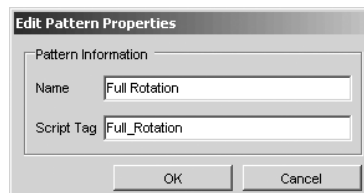


Figure 73. Edit Pattern Properties Dialog Box

- Edit the name and script tag, if desired.
- Click Start Recording. The Start Recording button changes to a Stop Recording button.

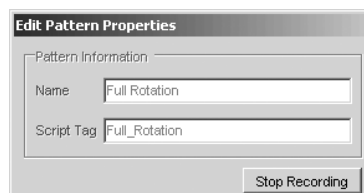


Figure 74. Edit Pattern Properties - Stop Recording

- Pan, tilt, zoom, focus, and adjust the camera's iris as desired.
- Click Stop Recording. The Edit Pattern Properties dialog box closes and the new settings are saved.

Renaming a Pattern

Renaming a pattern refers to changing the pattern's name and/or script tag using the Rename option. For instructions on changing the camera movement, refer to *Editing a Pattern*.

To rename a pattern for an ASCII camera, you must belong to, and log in under, a user group that allows you to edit the patterns for that camera. When you rename a pattern, the changes you make affect other users with permission to access the pattern.

To rename a pattern:

- Open the Device Control dialog box for the desired camera and go to the Patterns tab.
- Click the pattern you want to rename, and then Click Rename. The Edit Pattern Properties dialog box opens.

3. Edit the name and script tag as desired.
4. Click OK. The Edit Pattern Properties dialog box closes and your changes are saved.

NOTE: Changing the tag for a pattern that is referred to in a script introduces an error into the script. To correct the error, the system administrator must update the script so it uses the pattern's new script tag.

Unassigning a Pattern

Unassigning a camera's pattern deletes the pattern's name and script tag, leaving the camera movement stored in the camera intact. When you unassign a pattern the following changes take effect.

- The pattern name no longer appears in the patterns drop-down list in the camera's gadget.
- Scripts defined by the system administrator can no longer refer to the pattern.

To unassign a camera's pattern, you must belong to, and log in under, a user group that allows you to edit the patterns for that camera.

To unassign a pattern:

1. Open the Device Control dialog box for the desired camera and go to the Patterns tab.
2. Click the pattern you want to unassign, and then click Unassign. The pattern's name and script tag are deleted and the pattern appears in the list as Unassigned_i. Scripts will no longer be able to refer to the pattern, and the pattern will no longer be available through the patterns drop-down list in the camera's gadget.

NOTE: Unassigning a pattern that is referred to in a script introduces an error into the script.

Setting the Camera's Default Pattern

A camera's default pattern is the pattern the camera runs when it has been idle for a predefined time. The default pattern displays in bold print in the Device Control dialog box patterns list.

To set a camera's default pattern, you must belong to, and log in under, a user group that allows you to edit the patterns for that camera.

NOTE: You can define a default pattern or a home preset for a camera, but not both. Setting the default pattern clears the home preset, if there is one.

To set the default pattern:

1. Open the Device Control dialog box for the desired camera and go to the Patterns tab.
2. Click the pattern you want as the default pattern, and then click Set Default. The Edit Default Pattern dialog box opens.

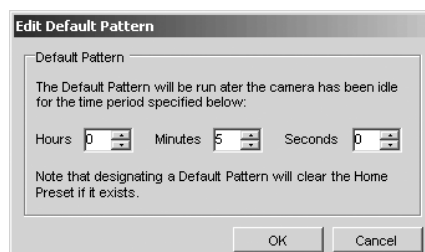


Figure 75. Edit Default Pattern Dialog Box

3. Enter the number of hours, minutes, and seconds that you want the camera to be idle before it runs the default pattern.

The Edit Default Pattern dialog box closes. The selected pattern becomes the default pattern, replacing the previous default pattern or home preset if there was one. The new default pattern appears in bold print in the list.

Clearing the Camera's Default Pattern

To clear a camera's default pattern, you must belong to, and log in under, a user group that allows you to edit the patterns for that camera.

To clear the default pattern:

1. Open the Device Control dialog box for the desired camera and go to the Patterns tab.
2. Click the default pattern from the list of patterns, and then click Clear Default. The selected pattern no longer appears in bold print in the list. There is no default pattern for that camera.

SEQUENCES

A sequence is a predefined series of camera movements and positions. Sequences are implemented in VMX300(-E) as scripts defined by the system administrator. To run a script, you must belong to, and log in under, a user group that allows you to run that script.

To run a script:

1. If the camera is switched to a destination device like an external monitor, open the device pop-up menu by right-clicking the destination device in the Device List, or right-clicking the device's icon on a map. If the camera is switched to a custom window, open the custom window drop-down menu by clicking the window and pressing Alt-Space Bar.
2. Click Run Script and select the desired script from the pop-up menu. The selected script runs. An entry for the script appears in the Session Manager.

AUXILIARIES

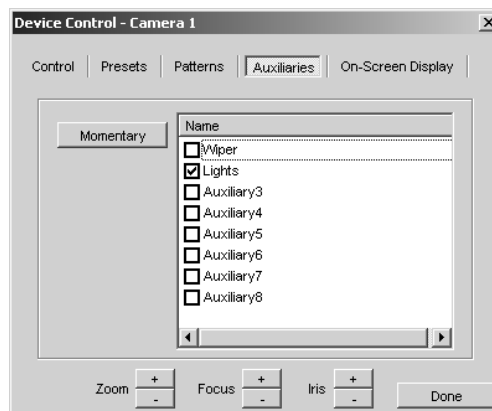


Figure 76. Device Control Dialog Box - Auxiliaries Tab

ASCII cameras can support auxiliary features, such as a wiper or lights, which are physically connected to auxiliary points on the camera. Each camera can have a limited number of auxiliaries. The maximum number depends on the camera model.

Auxiliaries are listed on the Auxiliaries tab of the Device Control dialog box. By default, auxiliaries are named Auxiliary*i*, where *i* is the auxiliary's number. Your system administrator can change an auxiliary's name to something more meaningful.

Controlling an Auxiliary

To control a camera's auxiliaries, you must belong to, and log in under, a user group that allows you to control the auxiliaries for that camera.

VMX300(-E) allows you to set an auxiliary to run continuously, or to run for just a moment.

To run an auxiliary for a moment, select the desired auxiliary name on the Auxiliaries tab and click Momentary. The auxiliary feature operates for a moment, then stops.

To run an auxiliary continuously, select desired auxiliary on the Auxiliaries tab, or double-click the auxiliary name. The auxiliary feature operates until the auxiliary's check box is cleared.

The Momentary option stops the auxiliary feature from running continuously. If the auxiliary is running continuously when you give the command to run it momentarily, the feature operates for a moment, then stops, and the check box is automatically cleared.

NOTE: In order for auxiliary controls to function as described here, the camera's auxiliary setting must be set to continuous mode.

ON-SCREEN DISPLAY

The On-Screen Display tab of the Device Control dialog box allows you to display the camera's on-screen menu on the destination device or custom window the camera is switched to. The options presented in the on-screen display depend on the camera model. Refer to the Pelco camera documentation for information on specific options.

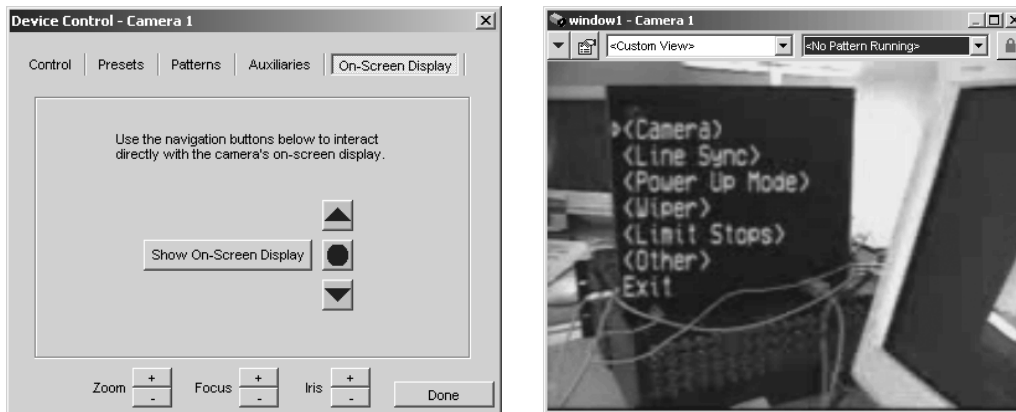


Figure 77. Device Control Dialog Box - On-Screen Display Tab (left) and Sample On-Screen Display (right)

Using the On-Screen Menu

To display the camera's on-screen menu:

1. Open the Device Control dialog box for the desired camera and go to the On-Screen Display tab.
2. Click Show On-Screen Display. The camera's on-screen menu appears in the destination device or custom window.
3. **Navigate the menu:** Use the up arrow and down arrow buttons on the On-Screen Display tab to move the option selector beside the desired menu option. Alternatively, send tilt up and tilt down commands using mouse or keyboard controls to move the option selector up and down in the menu.
4. **Select a menu item:** With the option selector positioned beside the desired option, click the Select On-Screen Display Menu Item button. The selected option executes.
5. **Exit:** To close the menu, navigate to the Exit option and click the Select On-Screen Display Menu Item button. The menu no longer appears.

LOCKING A CAMERA

You can prevent other users or scripts from controlling an ASCII camera by locking the camera. When a camera is locked, only the user or script that placed the lock can control the camera. If you attempt to control a locked camera, VMX300(-E) will display a message specifying that the camera is locked and who placed the lock. To lock and control a particular camera, you must belong to, and log in under, a user group that allows you to lock and control that camera.

Every VMX300(-E) user and script has a priority assigned by the system administrator. VMX300(-E) uses these priorities to resolve situations in which two or more users or scripts attempt to control a particular device at the same time. The user with the higher priority is given control of the device.

Depending on your priority, you might be able to take the lock from another user or a script that has locked a camera, giving you control of the camera. You can take the lock from any user with lower priority than you. You can take the lock from any script with equal or lower priority.

VMX300(-E) automatically unlocks a camera you have locked under the following circumstances:

- If you log off, either by closing the client, or by logging in a new user.
- If you locked the camera from the Control tab of the Device Control dialog box and you close the dialog box.
- If you locked the camera from the gadget in a custom window and you change the content type for that window.
- If you locked the camera from the gadget in a custom window and you clear Visible for that window in the Workspace Properties dialog box.

Locking has no effect on auxiliaries. Scripts and other users can still control auxiliaries when the camera is locked, regardless of their priority.

Understanding the Lock Button



The Lock button is used to lock and unlock the camera, and also provides information on whether the camera is currently locked, whether you can take the lock, and whether you can control the camera. The Lock button is located in the ASCII camera gadget and on the Control tab of the camera's Device Control dialog box.

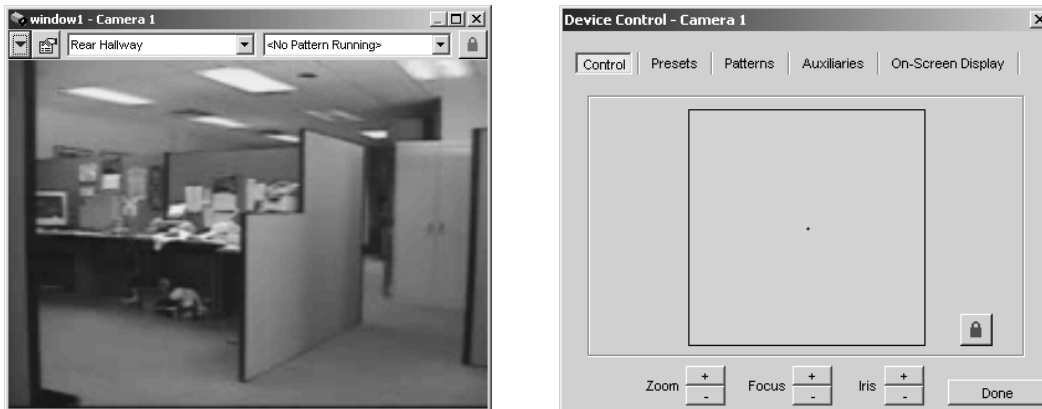


Figure 78. Lock Button Locations

The color of the padlock in the Lock button indicates whether you can control the camera. When the padlock is green, you can control the camera. When the padlock is yellow or red, you cannot control the camera. To control a particular camera, you must belong to, and log in under, a user group that allows you to control that camera. If you do not have permission to control the camera, the padlock will always be red or yellow.

The state of the Lock button indicates whether or not you can lock the camera. When the button is out, the camera either isn't locked, or it is locked, but you can take the lock from the user or script that placed the lock. When the Lock button is in, the camera is locked and you cannot take the lock from the user or script that placed the lock. To lock a particular camera, you must belong to, and log in under, a user group that allows you to lock that camera. If you don't have permission to lock the camera, the Lock button will always be in.

Permissions override priority. No matter how high your priority, you will never be able to lock or control a camera unless you have the necessary permissions.

If you have permission to lock and control a camera and a user with lower priority than you has the camera locked, your Lock buttons are red/out, indicating that you cannot control the camera, but you can take the lock from the other user and subsequently control the camera.

When another user with the same or higher priority than you has the camera locked, your Lock buttons are red/in, indicating that you cannot control the camera and you cannot take the lock from the other user.

When a script with equal or lower priority than you has the camera locked, your Lock buttons are yellow/out, indicating that you cannot control the camera, but you can take the lock from the script and subsequently control the camera.

When a script with higher priority than you has the camera locked, your Lock buttons are yellow/in, indicating that you cannot control the camera and you cannot take the lock from the script.

If you have the Control tab and the camera gadget open at the same time, you see two different instances of the Lock button. These two Lock buttons are independent of each other:

- If you locked the camera from the gadget, the Lock button on the Control tab is red/in, indicating that you cannot take the lock or control the camera from the Control tab. The Lock button on the gadget is green/in, indicating that you have locked the camera and can control it using keyboard controls or by clicking a custom window.
- If you locked the camera from the Control tab, the Lock button in the gadget is red/in, indicating that you cannot take the lock through the gadget or control the camera using keyboard controls or by clicking a custom window. The Lock button on the Control tab is green/in, indicating that you have locked the camera and can control it through the Control tab.

When you do not have the lock, the different instances of the Lock button are always in the same state.

Table I summarizes the different states of the Lock button.

Table I. Different States of the Lock Button

LOCK BUTTON COLOR/POSITION	INDICATES
Green/In	You have locked the camera from the window where the green/in Lock button is located. You can control the camera from this window. A user with higher priority can take the lock from you and subsequently control the camera. A script with equal or higher priority can take the lock from you and subsequently control the camera.
Green/Out	The camera is not locked. You can control the camera. You can lock the camera.
Yellow/In	A script with higher priority than you has locked the camera. The script can control the camera. You cannot take the lock from the script. You cannot control the camera.
Yellow/Out	A script with equal or lower priority than you has locked the camera. You cannot control the camera, but you can take the lock from the script and subsequently control the camera.
Red/In	A user with equal or higher priority than you has locked the camera. The user can control the camera. You can neither take the lock nor control the camera from the window where the red/in Lock button is located. Note: The user who locked the camera could be you. When you lock the camera through the gadget, the Lock button on the Control tab is red/in. When you lock the camera through the Control tab, the Lock button in the gadget is red/in.
Red/Out	A user with lower priority than you has locked the camera. You cannot control the camera, but you can take the lock from the lower priority user and subsequently control the camera.

TIP: You can only lock the camera when the Lock button is out. You can only control the camera when the padlock is green.

CONTROLLING A KBD300A KEYBOARD

The Pelco KBD300 driver is intended to control the KBD300A keyboard in CM6800 ASCII mode (keyboard firmware version 5.00 or higher required).

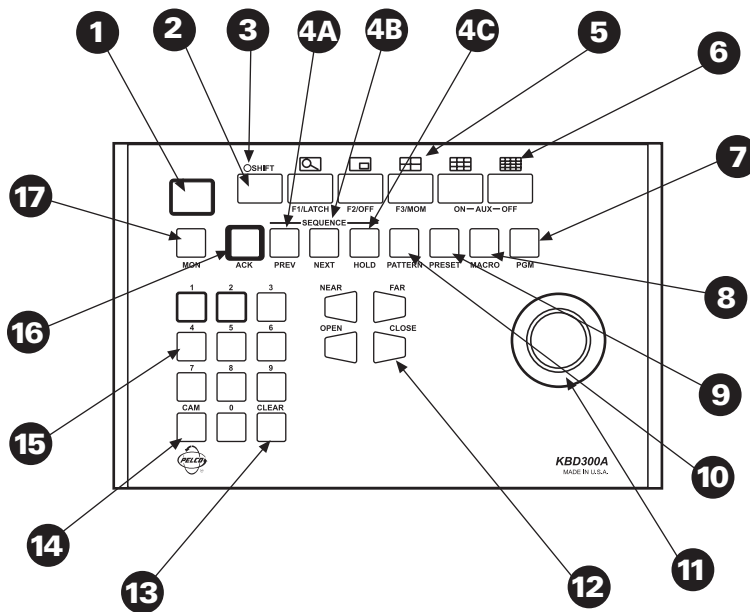


Figure 79. Keyboard Functions

Table J. KBD300A Button Functions

REFERENCE NUMBER	DESCRIPTION
1	LED display
2	Shift key
3	Shift key LED
4A-C	Sequence keys: Previous, Next, Hold
5	Function keys F1/Latch, F2/Off, F3/Mom control auxiliaries. With Shift on they control multiplexer display.
6	The AUX ON and AUX OFF keys control receiver auxiliaries. With Shift on they control multiplexer display.
7	Program key
8	Macro sequence key
9	Preset key
10	Pattern key
11	Joystick
12	Focus and iris keys (iris keys can be used to scroll through menus on the CM6800 only)
13	Clear key
14	Camera selection key
15	Keypad (numbers 1 through 0)
16	Acknowledge key
17	Monitor selection key

General instructions: Use the numeric keypad to type camera numbers, monitor numbers, and preset numbers. Your administrator should instruct you in the valid numbers. The MOM, AUX ON, AUX OFF, HOLD, PATTERN, and MACRO keys are custom keys. Your administrator should instruct you in each key's function.

NOTE: SHIFT must be off. Make sure the LED above the SHIFT key is not illuminated.

Log in: Press the ACK key. Type your user name. Press the CAM key. If you have a password, type your password and press the MON key.

Log out: Press the ACK key.

Select monitor: Type the monitor number and then press the MON key. The keyboard LED displays the selected monitor number.

Switch camera to monitor: Select the desired monitor. Type the camera number. Press the CAM key.

Switch to next camera number: Press the NEXT key.

Switch to previous camera number: Press the PREV key.

Pan and tilt: Select the desired camera. Move the joystick in the direction you want to pan and tilt the camera.

Zoom: Select the desired camera. Twist the joystick counterclockwise to zoom in. Twist the joystick clockwise to zoom out.

Focus near: Select the desired camera. Press and hold the NEAR key until the desired focus is attained.

Focus far: Select the desired camera. Press and hold the FAR key until the desired focus is attained.

Open iris: Select the desired camera. Press and hold the OPEN key until the desired iris is attained.

Close iris: Select the desired camera. Press and hold the CLOSE key until the desired iris is attained.

Preset: Select the desired camera. Type the preset number. Press the PRESET key.

CONTROLLING A CM9760-REL RELAY OUTPUT UNIT

The following control options are available for CM9760-REL relay units:

- Set a point to True.
- Set a point to False.
- Set a point's value momentarily to True.
- Disable a point.
- Enable a point.

All relay unit controls are available through the Device Control dialog box. In addition, your system administrator can write scripts that set the state of a relay point. Your system administrator should instruct you in what scripts are available to you and how to run them.

NOTE: To access a relay unit, the Pelco Relay driver must be running. Device icons appear as a hollow outline when the device driver is not running. If you try to open the Device Control dialog box when the driver is not running, you will get a connection error. Notify your system administrator if the driver is not running.

OPENING A CM9760-REL RELAY UNIT'S DEVICE CONTROL DIALOG BOX

The Device Control dialog box provides tools for controlling a relay unit. To access the Device Control dialog box, you must belong to, and log in under, a user group that allows you to access the Device Control dialog box.

Open the Device Control dialog box for a relay unit using one of the following methods:

- Double-click the device icon on a map.
- Double-click the device in the Device List.
- Right-click the device in the Device List and then click Show Control Dialog from the pop-up menu.



Figure 80. Relay Unit Device Icon

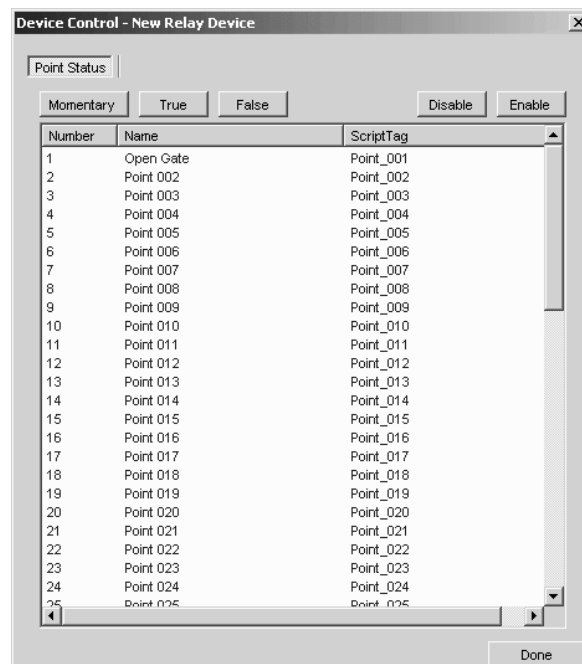


Figure 81. CM9760-REL Device Control Dialog Box

HOW TO CONTROL A RELAY UNIT

To control a relay unit, you must belong to, and log in under, a user group that grants you the necessary privileges. Your system administrator should instruct you in what privileges you have.

Set a Point to True

Click the desired point, and then click True. The point will be set to True. The point will appear in bold print in the Device Control dialog box.

Set a Point to False

Click the desired point, and then click False. The point will be set to False. The point will appear in normal print in the Device Control dialog box.

Set a Point's Value Momentarily to True

Click the desired point, and then position the pointer over the Momentary button, and click and hold the mouse button.

The point will be set to True for as long as you keep the mouse button depressed. The point will be set to False when you release the mouse button.

Disable a Point

Disabling a point prevents the point from changing state. Click the desired point, and then click Disable. The point will not be able to change state. The point will appear in the Device Control dialog box in italics. When the point is selected in the list, none of the buttons in the Device Control dialog box will be available, except the Enable button.

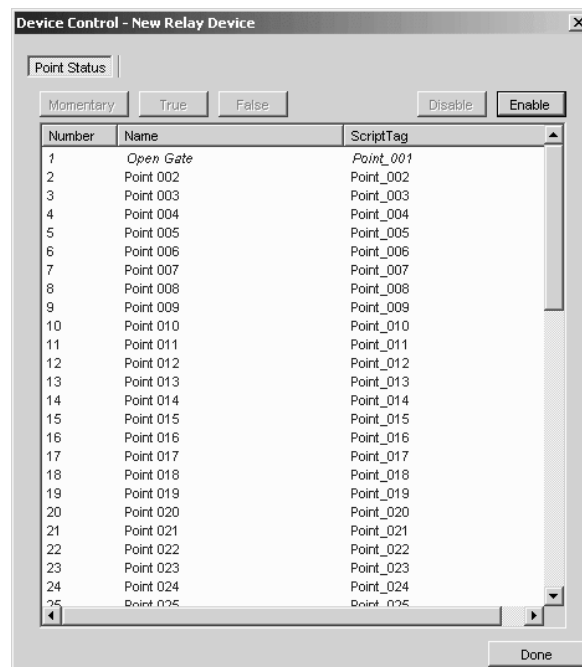


Figure 82. Relay Point 1 Disabled

Enable a Point

Enabling a point allows the point to change state. Click the desired point, and then click Enable. The point will appear in normal print in the Device Control dialog box.

CONTROLLING A SERIAL OUTPUT DEVICE

The serial output driver allows you to send ASCII commands to an external serial device, such as a camera. For example, you could send ASCII commands to report alarms to an access control system, start a VCR in play mode, or control a camera.

You can control a serial output device by sending ASCII commands to the device using one of the following methods:

- Custom button: Click a custom button in the device's Device Control dialog box.
- Script: Run a script.
- Text tab: Type an ASCII string on the Text tab of the desired device's Device Control dialog box, and then press Send.

Your administrator should instruct you in the particular device-control commands that are available for each serial output device and the method for sending them.

To control a particular serial output device, you must belong to, and be logged in under, a user group that grants you the necessary privileges. Your system administrator should instruct you in what privileges you have.

NOTE: To access a serial output device, the Serial Output driver must be running. Device icons appear as a hollow outline when the device driver is not running. If you try to open the Device Control dialog box when the driver is not running, you will get a connection error. Notify your system administrator if the driver is not running.

OPENING A SERIAL OUTPUT DEVICE'S DEVICE CONTROL DIALOG BOX

The custom buttons and Text tab methods of sending commands are available through the device's Device Control dialog box. To access the Device Control dialog box, you must belong to, and log in under, a user group that allows you to access the Device Control dialog box.

Open the Device Control dialog box for a serial output device using one of the following methods:

- Double-click the device icon on a map.
- Double-click the device in the Device List.
- Right-click the device in the Device List and then click Show Control Dialog from the pop-up menu.

COMx

Figure 83. Serial Output Device Icon

Using the Text Tab



Figure 84. Device Control Dialog Box - Text Tab

The Text tab method of sending ASCII commands allows you to type any device-control command and then send it. Unlike the custom buttons and scripts methods, you can send a command without the system administrator having to predefine it.

To control a serial output device using the Text tab, complete the following steps:

1. Open the Device Control dialog box for the serial output device you want to control.
2. Type the device-control command. Your system administrator should instruct you in what commands are available for each serial output device. Refer to *ASCII Command Special Characters* for instructions on incorporating unprintable characters and quotation marks into a command.
3. Click Send. The command is sent to the device.

ASCII Command Special Characters

If a command contains unprintable characters, replace each unprintable character with its three-digit ASCII code between angle brackets. For example, the command BLACK-HOT<Carriage Return> is represented in VMX300(-E) as **BLACK-HOT<013>**. Note that ASCII codes must be three digits in length. Add leading zeroes if an ASCII code contains less than three digits.

If a command contains single or double quotation marks, replace the quotation marks with their ASCII codes: <039> for a single quotation mark and <034> for a double quotation mark.

Other useful ASCII codes for unprintable characters are <002> for the Start of Text (STX) character and <003> for the End of Text (ETX) character.

Using Custom Buttons

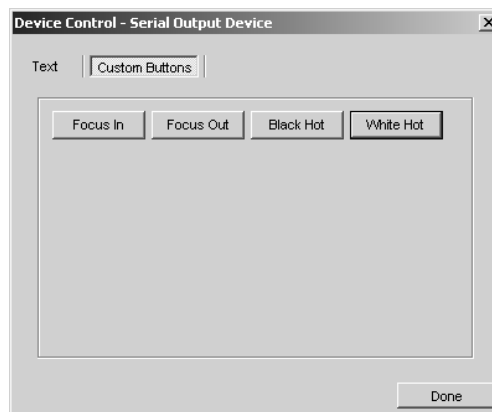


Figure 85. Device Control Dialog Box – Custom Buttons Tab

The Custom Buttons method of sending ASCII commands allows you to send commands that have been predefined by the system administrator. Clicking a custom button sends the command associated with the button to the serial output device. Your system administrator should instruct you in what each button does.

If the Custom Buttons tab is blank, the system administrator has not defined any custom buttons for that device.

To control a serial output device with a custom button, complete the following steps:

1. Open the Device Control dialog box for the serial output device you want to control.
2. Click the custom button for the command you want to send. The command is sent to the device.

Using a Script to Control a Serial Output Device

The system administrator can define scripts to send device-control commands to serial output devices. A script can be associated with a hotlink or label that you click, or it can be a freestanding entity that you run from a menu. Your administrator should instruct you in what scripts are available to you and what each script does.

To run a freestanding script, complete the following steps:

1. Open a script menu using one of the following methods:
 - Click a custom window, and then press Alt-Space Bar.
 - Right-click the device icon for a destination device.
 - In the Device List, right-click the serial output device you want to control.

The device pop-up menu opens.

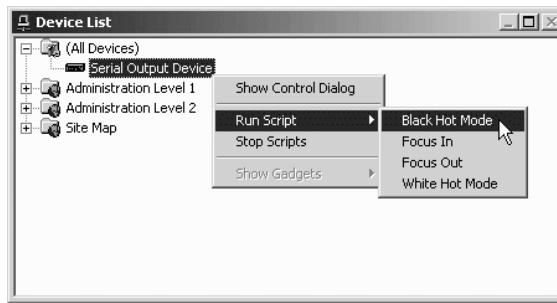


Figure 86. Using a Script to Control a Serial Output Device

2. Click Run Script, and then click the desired script from the submenu. The selected script runs.

For more information on working with scripts, refer to the *Scripts* section.

CONTROLLING AN IP DEVICE STATUS MONITOR

An IP device status monitor allows you to monitor the status of a networked device. Since almost every other VMX300(-E) device driver allows you to monitor the status of that device, you would only need to use the IP device status monitor to keep track of an IP device that is not in the VMX300(-E) system.

When the system administrator adds an IP device status monitor to the VMX300(-E) system, it acts as a placeholder for the IP device. The IP device status monitor periodically pings the IP device, and if the device fails to respond to the ping, then a notification appears in the VMX300(-E) system. Your system administrator should advise you as to what forms of notification are used for any IP device status monitors in your system.

Example: The system administrator configures a status monitor for an encoder/decoder that is not in the VMX300(-E) system. He then defines an alarm that prompts an operator to ask a technician to troubleshoot the encoder/decoder if it remains inaccessible for more than a minute.

ACCESSING IP DEVICE CONTROLS THROUGH AN EMBEDDED WEB SERVER

If the IP device has an embedded web server, you can access the embedded web server from the VMX300(-E) client, provided you log in under a user group that allows you to access the Device Control dialog box.

Open the Device Control dialog box for an IP device status monitor using one of the following methods:

- Double-click the device icon on a map.
- Double-click the device in the Device List.
- Right-click the device in the Device List and then click Show Control Dialog from the pop-up menu.

For information on controls available through the embedded web server, refer to the product documentation for the IP device.



Figure 87. IP Device Status Monitor Icon

MONITORING AN ACCESS CONTROL DEVICE

The Access Control driver allows you to monitor an access control device through the Device Control dialog box. To access an access control device's Device Control dialog box, you must belong to, and log in under, a user group that allows you to access the Device Control dialog box.

NOTE: To access the Device Control dialog box, the Serial Access Control must be running. Device icons appear as a hollow outline when the device driver is not running. If you try to open the Device Control dialog box when the driver is not running, you will get a connection error. Notify your system administrator if the driver is not running.

Open the Device Control dialog box for an access control device using one of the following methods:

- Double-click the device icon on a map.
- Double-click the device in the Device List.
- Right-click the device in the Device List and then click Show Control Dialog from the pop-up menu.

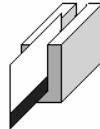


Figure 88. Access Control Device Icon

MONITORING ACCESS CONTROL POINTS

The Point Status tab shows the current status of each of the access control device's points. A point in bold print currently has value True. A point in regular print currently has value False. In Figure 89, point 4 is currently true, indicating that an alarm has been received from the northeast fire exit.

Your system administrator should instruct you in how you should respond to access control alarms.

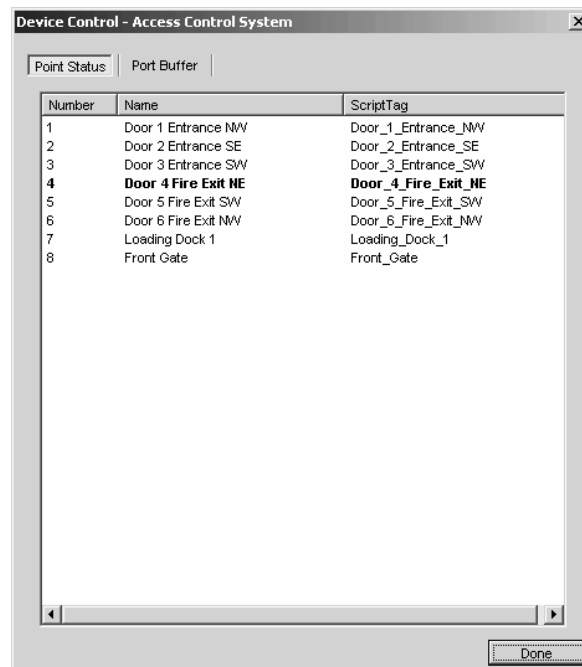


Figure 89. Monitoring Access Control Points

PORT BUFFER TAB

The Port Buffer tab shows the data coming in the COM port. The Port Buffer tab is used for diagnostic purposes.

Figure 90 shows an incoming string that matches the Pelco ASCII Protocol Alarm Pattern. Specifically, the substring '3Ea' matches the Pelco ASCII Protocol Alarm Pattern.

Once a string has been matched, it remains on the Point Buffer tab until a new string starts to come in, at which point the new string displays on the tab.

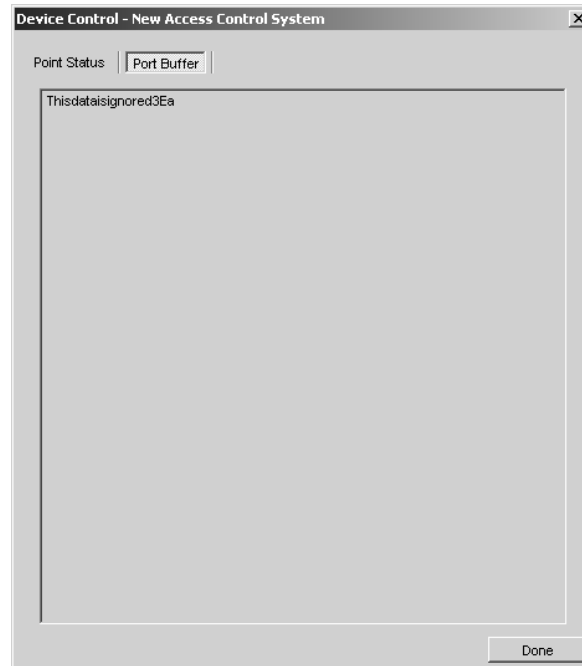


Figure 90. Port Buffer Tab

Gadgets

A gadget is a tool bar that provides tools for controlling a particular type of device.

For example, the gadget for a particular model of camera might have tools to move the camera to a preset, make the camera run a pattern, and lock the camera.



Figure 91. Sample Camera Gadget

NOTE: Only devices that are controllable have a gadget. Devices that cannot be controlled in any way, like fixed cameras and external monitors, do not have a gadget.

For information on the tools available for a particular type of device, refer to the Devices section.

Canvas Gadgets

Custom windows also have gadgets associated with them. A window's gadgets are actually associated with the window's canvases, which define the video display technology available to the window. Since a window might have access to more than one type of video display technology, windows can have more than one canvas. A window has a different gadget for each of its canvases. When video is displayed in a custom window, VMX300(-E) automatically uses the appropriate canvas for that signal and makes the gadget for that canvas available to you.

Analog Video Gadgets

VMX300(-E) supports the following video display technologies for analog video:

- Video for Windows
- Quad Video Display

Refer to the *Video for Windows Gadget* section and the *Quad Video Display Gadget* section for more information.

Gadgets Button



The gadgets button allows you to open the gadget for any device the video signal is switched through. In this way, a gadget provides access to all the devices in the switch path.

For example, a camera's signal might pass through an encoder/decoder before being transmitted to a custom window. In this case, the gadget allows you to access three gadgets: the camera's, the encoder/decoder's, and the canvas's. To open the gadget for one of the other devices in the switch path, click the Gadgets button and select the desired gadget from the drop-down list.



Figure 92. Gadgets Drop-Down List

VIDEO FOR WINDOWS GADGET



Figure 93. Video for Windows Gadget

The gadget for the Video for Windows canvas has the following tools:



1. **Gadgets:** The Gadgets button allows you to open the gadgets for the other devices in the switch path.



2. **VFW devices:** This button is used by administrators for troubleshooting the server configuration. If the workstation has more than one Video for Windows card in it, click this button to see a list of installed cards, including the card number for each card. This allows you to double-check that you used the correct card numbers when you configured the Video for Windows canvases in the server configuration.



3. **Properties:** Clicking the Properties button opens a drop-down menu with three options:

- Format
- Source
- Display

Each of these options allows you to set device settings for the Video for Windows card associated with the canvas. The device settings are specific to the model of Video for Windows card installed in your workstation. For more information on the device settings for your Video for Windows card, refer to the card's product documentation.



4. **Overlay:** Video for Windows canvases allow you to display video at a higher quality setting, Overlay, or lower quality, Preview. Click the Overlay button to display video at the higher quality setting. Motion appears smooth in Overlay mode.

Video displayed in Overlay mode cannot be maximized. If you maximize a custom window displaying Overlay video, the window itself will maximize, but the video will not change size.

In a multi-monitor system, Overlay mode only works on the primary monitor. Older workstations might not have the processing power required to display Overlay video.



5. **Preview:** Video for Windows canvases allow you to display video at a higher quality setting, Overlay, or lower quality, Preview. Click the Preview button to display video at the lower quality setting. Motion appears choppy in Preview mode.

Unlike video displayed in Overlay mode, video displayed in Preview mode can be maximized. If you maximize a custom window displaying Preview video, the window and video will both maximize.

In a multi-monitor system, Preview mode works on any monitor.



6. **Fit to window:** Click the Fit to Window button to fit the video perfectly within the video display area. This eliminates the black areas that appear on one or more sides of the video when the video does not fit exactly.



7. **Capture and save image:** The Capture and Save Image button allows you to take a snapshot of the video displayed in the window and save the image as a JPEG file. Clicking the button opens the Save JPEG As dialog box. Browse to the desired folder and type in a file name. Click Save to save the file and close the dialog box.

8. **Frames per second:** The Frames per Second setting controls how many video frames are displayed every second in Preview mode. Select a number from the drop-down list. A larger number results in smoother video, but requires more processing time. A smaller number gives choppy video, but requires less processing power.

The Frames per Second setting is not available in Overlay mode.

QUAD VIDEO DISPLAY GADGET



Figure 94. Quad Video Display Gadget

The Quad Video Display gadget provides the following tools:



Gadgets button: The Gadgets button allows you to open the gadgets for the other devices in the switch path.



Properties button: The Properties button opens the Quad Video Display Properties dialog box. Refer to *Configure Quad Video Display Properties* for instructions on using these tools.



Capture and Save button: The Capture and Save button allows you to take a snapshot of the video displayed in the window and save the image as a JPEG file.

CONFIGURE QUAD VIDEO DISPLAY PROPERTIES

Click each tab on the Quad Video Display Properties dialog box to adjust the settings contained on the tab. On each tab you can click Load Defaults to restore the default settings for the properties on that tab.

General Tab

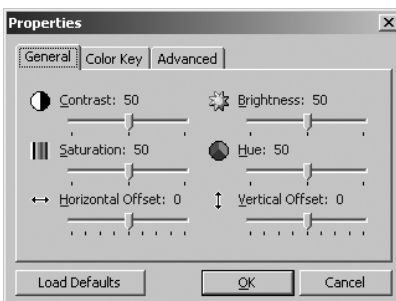


Figure 95. Quad Video Display Properties Dialog Box: General Tab

Use the General Tab to configure the following properties:

Contrast

Use the Contrast slider bar to increase or decrease the contrast of the video in the window.

Brightness

Use the Brightness slider bar to increase or decrease the brightness of the video in the window.

Saturation

Use the Saturation slider bar to increase or decrease the saturation of the video in the window.

Hue

Use the Hue slider bar to increase or decrease the hue of the video in the window.

Horizontal Offset

Use the Horizontal offset slider bar to move the video left or right within the video display area.

Vertical Offset

Use the Vertical offset slider bar to move the video up or down within the video display area.

Color Key Tab

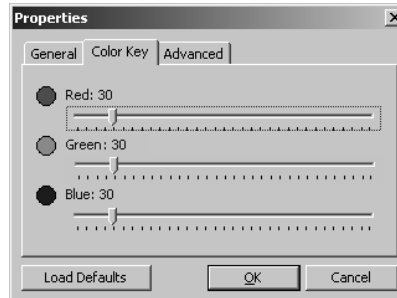


Figure 96. Quad Video Display Properties Dialog Box: Color Key Tab

The properties on the Color Key tab are reserved for future use.

Advanced Tab

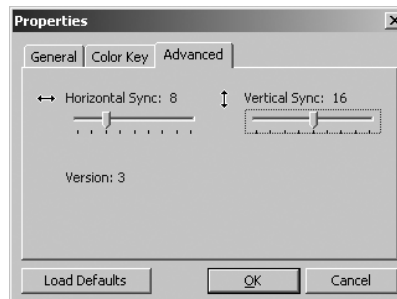


Figure 97. Quad Video Display Properties Dialog Box: Advanced Tab

Use the Advanced tab to adjust the horizontal and vertical sync of the video in the window.

Custom Windows

Custom windows are windows created by your system administrator that can be used for the following purposes:

- View live and archived video
- Display an Internet browser
- Connect to a remote workstation
- Display maps

NOTE: Custom windows that are used for viewing video are defined by the system administrator to display specific types of analog or digital video. Depending on your system's specific settings, you may be able to display more than one digital video window at a time. The number of digital video windows that can be displayed at one time is limited by the size and type of images selected for viewing.

Window mode: Only one type of content can be loaded in a window at a time. The window mode determines the type of content a window is prepared to accept.

There are five window modes:

- Live Video
- Archived Video
- Map
- Internet Browser
- Remote PC

You can set a window's mode by selecting the desired mode from the custom window pop-up menu. Refer to *Custom Window Pop-up Menu* for instructions.

Open and close windows: To open and close custom windows, you must have permission to edit workspaces. If the Windows option does not appear in the View menu, then you do not have permission to open and close custom windows.

To open a custom window, click View > Windows > <custom window>. To close a custom window, clear View > Windows > <custom window>, or click the window, press Alt-Space Bar, and select Close from the pop-up menu. A window with a Windows border can also be closed by clicking the Close button at the right of the window's title bar.

Alternatively, you can open and close custom windows using the Edit Workspace option of the File menu.

For information on adjusting the size and position of a custom window, refer to *Workspaces* and the *Appendix: Adjusting the Display*.

Components: Custom windows have the following components:

- Title bar (optional)
- Tool bar
- Display area
- Custom window pop-up menu

Title Bar

The title bar lists the window name and the name of the source device currently switched to the window.



Figure 98. Custom Window Title Bar

A custom window only has a title bar if the border specified in the workspace is a Windows Caption and Border. See *Workspaces* for more information. A Windows Caption and Border allows you to open the custom window pop-up menu by right-clicking the title bar. Refer to *Custom Window Pop-up Menu* for more information.

Tool Bar

The tool bar provides tools to control the window content. The specific controls depend on the type of content loaded in the window. For example, when video is loaded in the window, the control bar contains a gadget for controlling the video source device, whereas in Map mode, the tool bar contains tools for loading maps and adjusting how the map is displayed. Refer to *Window Mode* for information on the different types of content that can be displayed in custom windows.

Display Area

The display area is the part of the custom window used to display content. The type of content depends on the window mode. For example, in Live Video or Archived Video mode, the video displays in the display area, whereas in Map mode, the map displays in the display area.

Custom Window Pop-up Menu

The custom window pop-up menu allows you to do the following things:

- Select the window mode
- Run and stop scripts
- Adjust how the window is displayed

These options are also available through keystroke commands.



Figure 99. Custom Window Pop-up Menu

Open menu: To open the custom window pop-up menu, click the desired window and press Alt-Space Bar. Alternatively, if the window has a Windows title bar, you can right-click the title bar to open the pop-up menu. Select an option by clicking it in the menu.

Use keystroke: To select an option using a keystroke, click the window and press the keystroke for the desired option.

Table K lists the custom window pop-up menu options and what they do.

Table K. Custom Window Pop-up Menu Options

COMMAND	KEYSTROKE	USE	OPTION AVAILABLE WHEN
Show Controls	Alt-S	Display the window's control bar.	The window's control bar is hidden.
Hide Controls	Alt-H	Hide the window's control bar.	The window's control bar is showing.
Live Video	Alt-L	Prepare the window to display live video.	You have permission to view live video, and the workspace has Live Video selected as permitted content.
Archived Video	Alt-A	Prepare the window to display archived video.	You have permission to view archived video, and the workspace has Archived Video selected as permitted content.
Map	Alt-M	Prepare the window to display a map.	You have permission to view maps, and the workspace has Maps selected as permitted content.
Internet Browser	Alt-I	Load the workstation's default Internet browser into the window.	You have permission to view Web pages, and the workspace has Internet Browser selected as permitted content.
Remote PC	Alt-P	Prepare to connect to a remote workstation.	You have permission to view remote PCs (workstations), and the workspace has Remote PC windows selected as permitted content.
Run Script	n/a	Select a script and run it on your workstation.	Always available. If you do not have permission to run any scripts, the Run Script submenu will say <no scripts>.
Stop Scripts	n/a	Stop all the scripts that you started from that window.	Always available. If you did not start any scripts from that window, this option has no effect. This option does not affect scripts you have started from other windows or devices, nor does it affect scripts started by another operator.
Restore	n/a	Restore a maximized window to its previous size and position.	The workspace has Maximizable selected.
Move	n/a	Reposition window.	The workspace has Moveable selected.
Size	n/a	Resize window.	The workspace has Sizeable selected.
Maximize	n/a	Maximize window.	The workspace has Maximizable selected.
Close	Alt-F4	Close window.	You have permission to edit workspaces.

NOTES:

- To use the Move command to move a custom window that has a border of type Windows Caption and Border, select Move from the menu, position the pointer over the title bar, and drag the window to its new location.
- To use the Move command to move a custom window that has a border of type No Caption or Border, or of type Custom Caption and Border, select Move from the menu, click an arrow key, then either use the arrow keys to position the window, or simply move the pointer to the new location and click to freeze the window in place.
- A window's border type is given on the Appearance tab of the Edit Workspace dialog box. Refer to *Editing a Workspace* for more information.

VIEWING LIVE VIDEO

To view live video in a custom window:

- You must belong to, and be logged in under, a user group that permits you to view live video in custom windows. Refer to *User Groups* for more information.
- The workspace must have Live Video selected as permitted content. If you have permission to work with workspaces, you can edit the workspace and set the types of permitted content. Refer to *Workspaces* for more information.
- The system administrator must set up the server to allow live video in that window.

NOTE: You can only view video from a server other than your home server if your system administrator has set up the servers to allow it.

To view live video in a custom window:

1. Change the window mode to Live Video. Refer to *Custom Window Pop-up Menu* for instructions. If a device is switched to the window, a gadget appears in the window's control bar. If no device is switched to the window, << no controls available >> appears in the control bar.
2. Switch the source device (generally a camera) to the window. Refer to *Devices - Switching a Device* for instructions. The video appears in the display area and the source device's gadget appears in the window's control bar.



Figure 100. Viewing Video in a Custom Window

CAPTURING LIVE VIDEO

Some canvas gadgets have a Capture and Save Image button that allows you to take a snapshot of the video displayed in the window. Images are saved in JPEG file format.

To capture a live video image:



1. Click the Gadgets button and select the canvas gadget from the drop-down list. The canvas gadget appears in the window's control bar.



2. Click the Capture and Save Image button. The Save JPEG As dialog box opens.
3. Browse to the desired folder and type in a file name.
4. Click Save. The image file is saved and the Save JPEG As dialog box closes.

CONTROLLING A CAMERA

The particular tools available for controlling a camera depend on the model of camera. Typically, the tools include the following:

- **Pan, tilt, zoom controls:** VMX300(-E) provides both mouse and keyboard controls for panning, tilting, and zooming. To pan and tilt using the mouse, click the custom window's display area in the direction you want to move the camera. For example, to pan and tilt up and to the left, click above and to the left of the center of the display area. Refer to *PTZ Controls* for more information.
- **Presets:** The Presets drop-down list in the camera's gadget lists the presets for that camera. Select a preset from the list to make the camera go to the preset. If the camera's current view is not the result of going to a preset, <Custom View> appears in the drop-down list. You can also create, modify, and delete presets, provided you have permission to open the camera's Device Control dialog box. For detailed information on presets, refer to the *Devices* section.
- **Lock:** The Lock button allows you to take exclusive control of the camera. Click the Lock button to prevent a script or another operator from controlling the camera. You can only lock the camera when the Lock button is out. You can only control the camera when the Lock button's padlock is green. For detailed information on locking the camera, refer to the *Devices* section.

For information on the other tools available for controlling a particular camera, refer to the *Devices* section.

PTZ CONTROLS

VMX300(-E) provides both mouse and keyboard controls for panning, tilting, and zooming.

Mouse controls: To use the mouse to control a camera, click the custom window's display area in the direction you want the camera to move. Table L lists the mouse controls for panning, tilting, and zooming a camera.

Table L. Mouse Controls

CAMERA CONTROL	MOUSE ACTION
Pan left	Click to the left of center
Pan right	Click to the right of center
Tilt up	Click above the center
Tilt down	Click below the center
Zoom in	Turn the mouse wheel away from you
Zoom out	Turn the mouse wheel toward you
Focus near	<Shift> Zoom in
Focus far	<Shift> Zoom out
Iris open	<Alt> Zoom in
Iris closed	<Alt> Zoom out

To pan and tilt the camera incrementally, click once. Clicking close to the center moves the camera in small increments. The further away from the center you click, the larger the increments the camera moves.

To pan and tilt the camera continuously, click and hold the mouse button depressed. Clicking close to the center moves the camera slowly. The further away from the center you click, the faster the camera moves. Release the mouse button to stop panning and tilting.

To zoom incrementally, turn the mouse wheel one click. To zoom continuously, turn the mouse wheel continuously.

Keyboard controls: To use keyboard controls in a custom window, click the window's display area to make it active, then use keyboard controls as desired. Table M describes keyboard controls.

Table M. Keyboard Controls

CONTROL	KEYSTROKE	DESCRIPTION
Pan left	←	Left Arrow key
Pan right	→	Right Arrow key
Tilt up	↑	Up Arrow key
Tilt down	↓	Down Arrow key
Pan and tilt up and to the right	Pg Up	Page Up key on numeric keypad
Pan and tilt down and to the right	Pg Dn	Page Down key on numeric keypad
Pan and tilt up and to the left	Home	Home key on numeric keypad
Pan and tilt down and to the left	End	End key on numeric keypad
Zoom in	+	Plus key on numeric keypad
Zoom out	–	Minus key on numeric keypad
Focus near	<Shift> +	Shift key and Plus key
Focus far	<Shift> –	Shift key and Minus key
Iris open	<Alt> +	Alt key and Plus key
Iris closed	<Alt> –	Alt key and Minus key

NOTE: To use navigation keys on the numeric keypad, Num Lock must be off.

VIEWING ARCHIVED VIDEO

To view archived video in a custom window:

- You must belong to, and be logged in under, a user group that permits you to view archived video in custom windows. Refer to *User Groups* for more information.
- The workspace must have Archived Video selected as permitted content. If you have permission to work with workspaces, you can edit the workspace and set the types of permitted content. Refer to *Workspaces* for more information.
- The system administrator must set up the server to allow archived video in that window.

LOCATING ARCHIVED VIDEO

There are two common approaches to locating archived video:

- **Using the date/time of an archived alarm or event:** The video you want to view coincided with an alarm or event that is archived, and you know the approximate date/time of the alarm or event. For example, you might want to view the video recorded when a door alarm was triggered.

In this scenario, you use an estimate of the date/time to locate the alarm or event in the Session Manager, then drag the alarm or event from the Session Manager to the custom window to copy the selection to the window.

You can only use this approach if the system administrator has set up the server to associate the camera with the alarm. Your system administrator should instruct you in whether you can use this approach. Refer to *Locating Archived Video via an Archived Alarm or Event* for instructions.

- **Using the date/time only:** You know the approximate date/time of the video you want to view, but there is no corresponding alarm or event archived.

In this scenario, you use the Event Picker in the custom window to zero in on the date/time as closely as you can, then you browse to locate the desired archives. Refer to *Locating Archived Video via the Date/Time Only* for instructions on using this approach.

Locating Archived Video via the Date/Time Only

Follow this approach when you know the approximate date/time of the video you want to view, but there is no corresponding archived alarm or event.

1. Change the window mode to Archived Video. Refer to *Custom Window Pop-up Menu* for instructions.
2. Use the custom window's Event Picker to select a date/time as close to the date/time of the archive as possible, either by building a date/time from the year down, or by zooming to a time unit. Refer to *Event Picker - Building a Date/Time* and *Zooming to a Time Unit* for instructions. The selected date/time appears in the bottom row of the Event Picker.

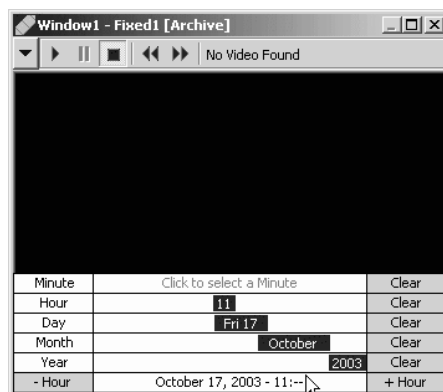


Figure 101. Selecting a Date and Time

3. Click the date/time in the bottom row of the custom window's Event Picker. If a camera is switched to the window, VMX300(-E) loads and plays the archived video for that camera, cued to the date/time selected in the Event Picker, provided the video exists.



Figure 102. Viewing Archived Video

4. If desired, switch a (different) camera to the custom window. Refer to *Devices - Switching a Device* for instructions. The gadget for the archiving device the camera is connected to appears in the window's control bar. If there is archived video for that camera, it loads and plays in the window's display area, cued to the date/time selected in the Event Picker.

TIPS:

- If you know which camera the archived video originated from, you can switch the camera to the custom window before selecting a date/time in the Event Picker. If the camera is already switched to the window, you do not need to switch it again. If you do not know which camera the video originated from, first select the date/time, then switch different cameras to the window successively until you find the one you want.
- If your installation has multiple cameras and you have more than one custom window to view video in, you can play back synchronized archived video from several cameras simultaneously. Drag a different camera to each custom window and select the desired date/time in each window's Event Picker. There is a delay between windows equivalent to the length of time it took you to drag the next camera to its window.

NOTE: If you attempt to load archived video from a camera or date/time for which no archived video exists, "No Video Found" appears in the custom window control bar.

Locating Archived Video via an Archived Alarm or Event

Follow this approach when the video you want to view coincided with an alarm or event, and you know the approximate date/time of the alarm or event. In this scenario, you use an estimate of the date/time to locate the alarm or event in the Session Manager, then drag the alarm or event from the Session Manager to the custom window to copy the selection to the window. The alarm or event must be archived.

NOTE: You can only use this approach if the system administrator has set up the server to associate the camera with the alarm. Your system administrator should instruct you in whether you can use this approach.

1. If necessary, open the Session Manager by clicking View > Session Manager.
2. Click the Archive View button on the Session Manager tool bar to go into Archive View. The Event Picker appears at the bottom of the Session Manager window, with an area for listing archived events above it.
3. Use the Session Manager's Event Picker to select a date/time as close to the date/time of the alarm or event as possible, either by building a date/time from the year down or by zooming to a time unit. Refer to *Event Picker - Building a Date/Time* and *Zooming to a Time Unit* for instructions. The selected date and time appears in the bottom row of the Event Picker.

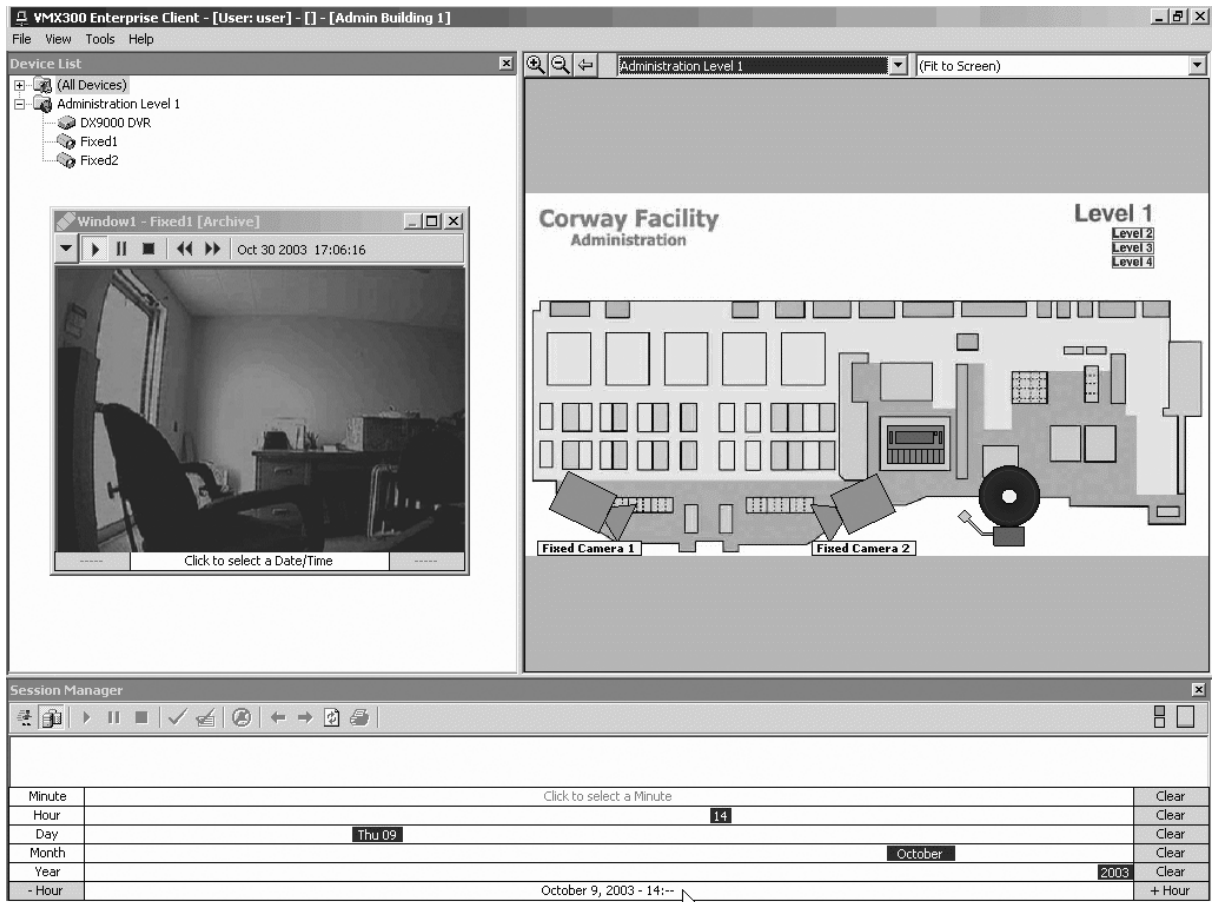


Figure 103. Selecting a Date and Time in the Session Manager

- Click the date/time in the bottom row of the Session Manager's Event Picker. A list of the retrieved events appears in the Session Manager window above the Event Picker. As well, each archived alarm or event is represented as a small vertical bar in the Event Picker's Event Row. Each entry in the list is colored the same as the corresponding bar in the Event row.

Only the events for the selected time period are retrieved. For example, if you specified a date/time down to the hour, only the archived events for that hour appear.

- Locate the alarm or event by browsing or filtering the archives. Refer to *Session Manger - Browsing Archived Alarms and Events* and *Filtering Archived Alarms and Events* for instructions.
- Drag the alarm or event from the list in the Session Manager to the custom window's display area. The custom window's Event Picker acquires the same selection as the Session Manager's Event Picker, including the date/time range and the alarm or event selected.

If the system administrator has associated the alarm or event with a camera, VMX300(-E) automatically switches the camera to the window and retrieves its archived video, cued to the date/time of the alarm or event. For example, the system administrator might associate a door alarm with a camera that points at the door. When you drag the archived alarm from the Session Manager to the custom window, the video from the camera that points at the door loads and plays, cued to the time of the alarm.



Figure 104. Viewing Video from an Archived Alarm or Event

If the system administrator has not associated a camera with the alarm or event and a camera is switched to the window, VMX300(-E) loads and plays the archived video for the currently switched camera, cued to the date/time of the dragged alarm or event.

TIPS:

- You can prevent VMX300(-E) from automatically loading the video associated with an alarm or event by dragging the alarm or event to the custom window's Event Picker instead of to the custom window's display area.
- If your installation has multiple cameras and you have more than one custom window to view video in, you can play back synchronized archived video from several cameras simultaneously. Select the desired date/time in each window's Event Picker. Drag a different camera to each custom window. There is a delay between windows equivalent to the length of time it took you to drag the next camera to its window.

NOTE: If you select a date/time and camera for which no archived video exists, "No Video Found" appears in the custom window control bar.

CONTROLLING AN ARCHIVE DEVICE

The particular tools available for controlling an archive device depend on the model of archive device. Typically, there are these tools:

- ▶ • **Play:** Play the video.
- ⏸ • **Pause:** Pause playing video. Click the Pause button again to resume playing.
- • **Stop:** Stop playing video and unload it from the custom window.
- ◀◀ • **Rewind:** Rewind the video.
- ▶▶ • **Fast forward:** Advance the video.
- **Date and time:** Indicates the playback date and time of the currently playing video.

For information on the tools available for a particular model of archive device, refer to the *Devices* section.

Archived video automatically starts playing when it is loaded into a custom window. If a date/time is selected in the Event Picker, the video will be cued to that date/time. If no date/time is selected, the video will be cued to at or near the current date/time. While archived video is playing, the green arrow in the Event Picker advances across the Event row. Refer to *Event Picker* for instructions on locating, selecting and loading archived video.

If you have stopped or paused the video, you can resume it by clicking the Play button.

CURSOR MODE

The playback time in the gadget displays the date/time of the video that is currently playing. The Event Picker time displayed in the top row of the Event Picker depends on the cursor mode selected:

- **Independent:** When Independent cursor mode is selected, the Event Picker time remains fixed at the original date/time you selected, independent of the playback time.
- **Auto select:** When Auto Select cursor mode is selected, the Event Picker time advances whenever the playback time coincides with an archived alarm or event. Thus the Event Picker time always shows the date/time of the most recently passed alarm or event.
- **Synchronized:** When Synchronized cursor mode is selected, the Event Picker time advances in step with the playback time.

To set the cursor mode, right-click the Event Picker in the custom window and select the desired mode from the pop-up menu.

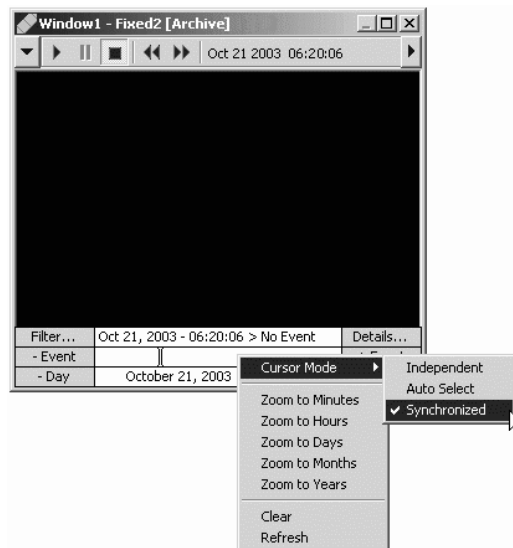


Figure 105. Selecting Cursor Mode

TIP: Use Synchronized cursor mode to track a moving object, such as a person or vehicle, in a single custom window. Suppose the object moves across the range of Camera 1 to within the range of Camera 2. Track the object as follows:

1. Set the cursor mode to Synchronized.
2. Switch Camera 1 to the window.
3. Start the video playing at the desired time.
4. When the object leaves the range of Camera 1, switch Camera 2 to the window. The video from Camera 2 automatically cues to the Event Picker time, which is synchronized with the playback time, picking up where the Camera 1 video left off.

VIEWING MAPS

To load a map into a custom window:

- You must belong to, and be logged in under, a user group that permits you to view maps in custom windows. Refer to *User Groups* for more information.
- The workspace must have Maps selected as permitted content. If you have permission to work with workspaces, you can edit the workspace and set the types of permitted content. Refer to *Workspaces* for more information.

To load a map into a custom window:

1. Change the window mode to Map. Refer to *Custom Window Pop-up Menu* for instructions.

The tool bar for maps will appear in the window's control bar. The tool bar has the same tools as the Main window's map viewport tool bar. The tools work the same way, except they act on the map in the custom window rather than the map in the Main window's map viewport. For information on using the zoom buttons, the Previous View button and predefined views drop-down list, refer to *Maps - Adjusting the Map Display*.

2. Click the arrow to the right of the maps drop-down list and select a map from the list. The map appears in the display area.

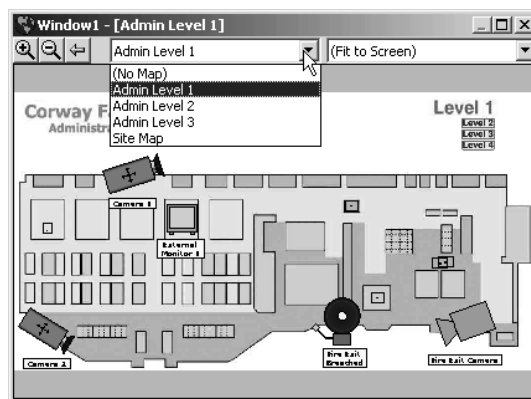


Figure 106. Loading a Map into a Custom Window

NOTE: A hotlink or label that loads a map into a specific window always loads the map into the same window, no matter where the script is run from. For example, suppose a hotlink on Map 1 loads Map 2 into the Main window map viewport. If Map 1 is loaded into the Main window map viewport and the hotlink is clicked, Map 2 loads in the Main window map viewport. If Map 1 is loaded into a custom window and the hotlink is clicked, Map 2 still loads in the Main window map viewport, not the custom window.

VIEWING AN INTERNET BROWSER

To view an Internet browser in a custom window:

- You must belong to, and be logged in under, a user group that permits you to view Web pages in custom windows. Refer to *User Groups* for more information.
- The workspace must have Internet Browser selected as permitted content. If you have permission to work with workspaces, you can edit the workspace and set the types of permitted content. Refer to *Workspaces* for more information.

To view an Internet browser in a custom window:

1. Change the window mode to Internet Browser. Refer to *Custom Window Pop-up Menu* for instructions. The Internet browser tool bar appears in the window's control bar and the most recently loaded Web page appears in the display area.

At the left end of the tool bar is the Controls button. At the right end of the tool bar is the Go button. All the buttons between the Controls button and the Go button are specific to the Internet browser loaded on your workstation. Refer to the browser documentation for information on its buttons.



2. **Go:** To navigate to a different Web page, type the URL you want to go to in the browser's Address box and click the Go button.

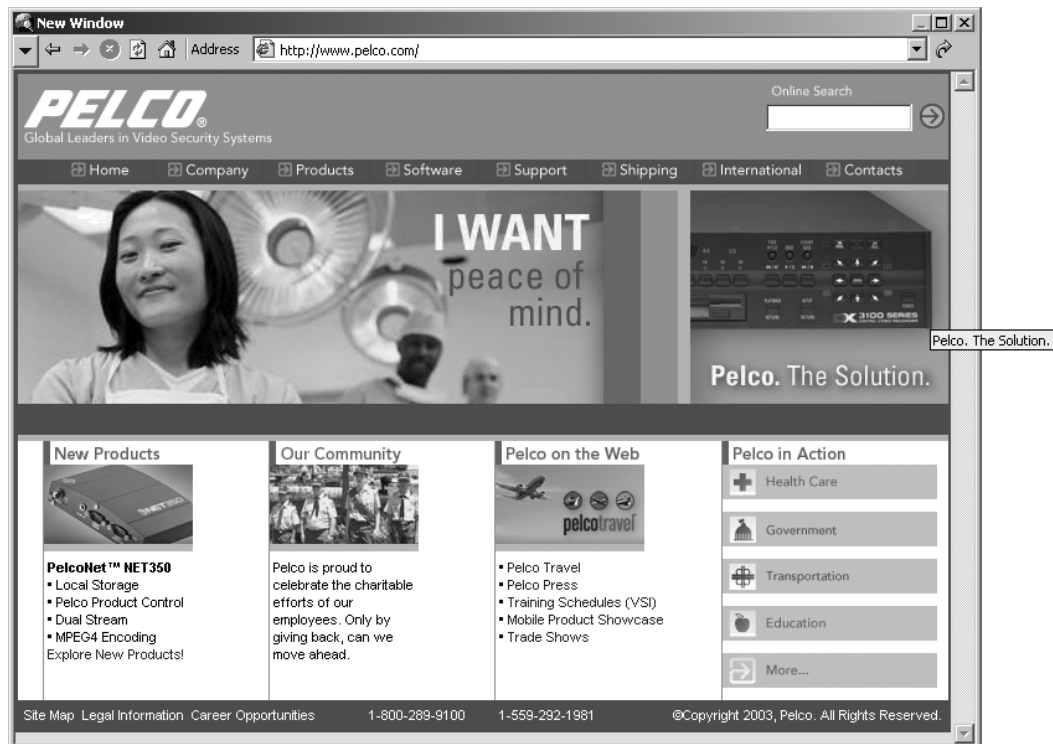


Figure 107. Viewing an Internet Page

VIEWING A REMOTE PC (WORKSTATION)

NOTE: To connect to a workstation remotely, a remote desktop server must be running on the workstation you are connecting to. Refer to *Remote Desktop Servers* for instructions on running a remote desktop server.

Connecting to a workstation remotely enables you to do anything you could do if you were connected directly, such as run programs or edit files.

TIP: An administrator can configure a VMX300(-E) server remotely from a client by having a remote desktop server running on the server PC.

NOTE: Controlling a workstation remotely interferes with local control of the workstation. Do not control a workstation remotely when someone is using the workstation.

In order to view a remote workstation (PC) in a custom window the following conditions must apply:

- You must belong to, and be logged in under, a user group that permits you to view remote PCs in custom windows. Refer to *User Groups* for more information.
- The workspace must have Remote PC Windows selected as permitted content. If you have permission to work with workspaces, you can edit the workspace and set the types of permitted content. Refer to *Workspaces* for more information.

To view a remote workstation (PC) in a custom window complete the following steps:

1. Change the window mode to Remote PC. Refer to *Custom Window Pop-up Menu* for instructions. The Remote PC tool bar appears in the window's control bar.
2. Select a remote desktop from the Remote Desktop Name drop-down list. Alternatively, type the workstation's IP address, or, for a workstation on the same local area network, the workstation name. The selected desktop name appears in the Remote Desktop Name box.
3. **Connect:** Click the Connect button or press Enter. The Remote Desktop Log On dialog box opens.



Figure 108. Remote Desktop Log On Dialog Box

4. **Password:** Type the password and click OK. The password is set on the remote desktop server. Refer to *Remote Desktop Servers* for instructions on setting the password. The Remote Desktop Log On dialog box closes and the remote desktop appears in the custom window's display area.

NOTE: When the remote PC server is started, the Windows desktop wallpaper (if any) is turned off to minimize bandwidth. The resulting Windows background (plain black or blue) will be visible when the PC is viewed remotely from the VMX300(-E).



Figure 109. Viewing a Remote PC

The pointer appears as a small square. As well, the remote workstation's pointer appears, in whatever form it has on the remote workstation. There is a delay between the position of the small square pointer and the remote workstation's pointer. The small square pointer indicates the true position and should be used when performing an operation on the remote desktop.



5. **Disconnect:** To disconnect from the remote workstation, click the Disconnect button or change the window mode. You are logged off and the remote desktop disappears from the display area.

Scripts

Scripts are programs written by the system administrator to automate common actions.

Some scripts are associated with an object, such as a hotlink, label, alarm, or schedule. Other scripts are free-standing entities that you can run from a menu. Camera sequences are generally written as free-standing scripts.

This section discusses free-standing scripts. For information on hotlinks and labels, refer to *Maps - Hotlinks* and *Maps - Labels*. For information on alarms, refer to *Alarms and Events*. For information on schedules, refer to *Schedules*.

VMX300(-E) provides tools to run a script from a particular destination device or window, pause a script, stop a script, and stop all the scripts you started from a particular destination device or window.

NOTE: Depending on how the system administrator has written the script, the destination device or window you start a script from is not necessarily where the script performs its actions. For example, the system administrator can write a script that loads video in Window2, no matter which destination device or window you click to open the pop-up menu and run the script from.

On the other hand, the system administrator can also write scripts that are designed to act on the window you run the script from. Your system administrator should instruct you in what to expect from the different scripts you run.

RUNNING A SCRIPT

1. To run a script, use one of the following methods:
 - Click the custom window you want to start the script from and press Alt-Space Bar.
 - In the Device List, right-click the device you want to start the script from.
 - Right-click the device icon for the destination device you want to start the script from.

A pop-up menu opens.

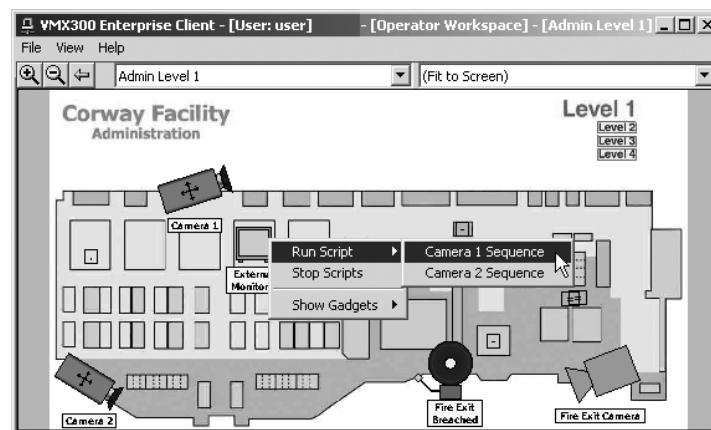


Figure 110. Running a Script

2. Click Run Script and select the desired script from the submenu. The selected script runs. An entry for the script appears in the Session Manager.

PAUSING A SCRIPT

1. To pause a running script, click the Session Manager entry for the script you want to pause.



2. Click the Pause button on the Session Manager tool bar. The status of the Session Manager entry is set to Paused and the script temporarily stops running. The script statement that is in the process of executing must complete before the script will pause, possibly resulting in a delay.



- To resume a paused script, click the Session Manager entry for the script you want to start running again, and then click the Resume button on the Session Manager tool bar. The script resumes running.

STOPPING A SINGLE SCRIPT

Stopping a script is permanent. To stop a script temporarily so you can later resume running it, pause the script as described in *Pausing a Script*.

To stop a single script that you started running:

1. Select the Session Manager entry for the script you want to stop.



2. Click the Stop button on the Session Manager tool bar. The script stops and the status of the Session Manager entry becomes Complete. Note: The script statement that is in the process of executing must complete before the script will stop, possibly resulting in a delay.

NOTE: You can also stop a single script as described in *Stopping All Scripts*, provided you have only started one script from the destination device or window.

STOPPING ALL SCRIPTS

You can simultaneously stop all the scripts you started from a particular destination device or window, as follows:

1. Do one of the following:
 - Click the custom window you started the script from and press Alt-Space Bar.
 - In the Device List, right-click the device that you started the script from.
 - Right-click the device icon for the destination device that you started the script from.

A pop-up menu opens.

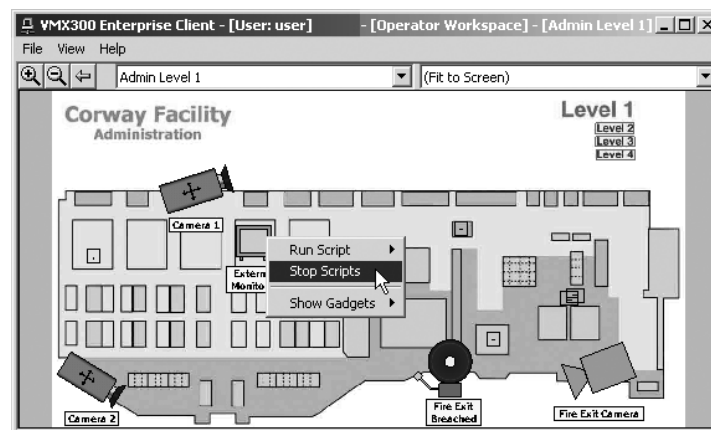


Figure 111. Stopping a Script

2. Click Stop Scripts. All the scripts that you started from that destination device or window stop. The status of the scripts' entries in the Session Manager become Complete. Note: The script statement that is in the process of executing must complete before a script will stop, possibly resulting in a delay.



TIPS:

- If you want to stop a script but you forget where you started it, look in the Session Manager. The Description column specifies where the script was started.
- If you have only started one script from the destination device or window, you can also stop it as described in *Stopping a Single Script*.

NOTES:

- The Stop Scripts option has no effect on scripts that you started from another destination device or window. This allows you to stop a camera sequence that you started from one window without affecting sequences that you started from other windows.
- The Stop Scripts option has no effect on scripts started by other operators.

Event Picker

The Event Picker is used to locate and retrieve archived video and archived events.

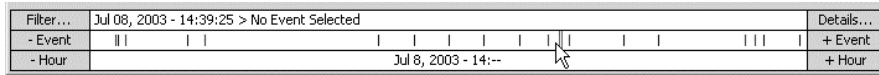


Figure 112. Event Picker

The Event Picker is accessed through custom windows in Archived Video mode or through Archive View of the Session Manager. You can have more than one Event Picker open at a time: one in the Session Manager and one in each custom window in Archived Video mode.

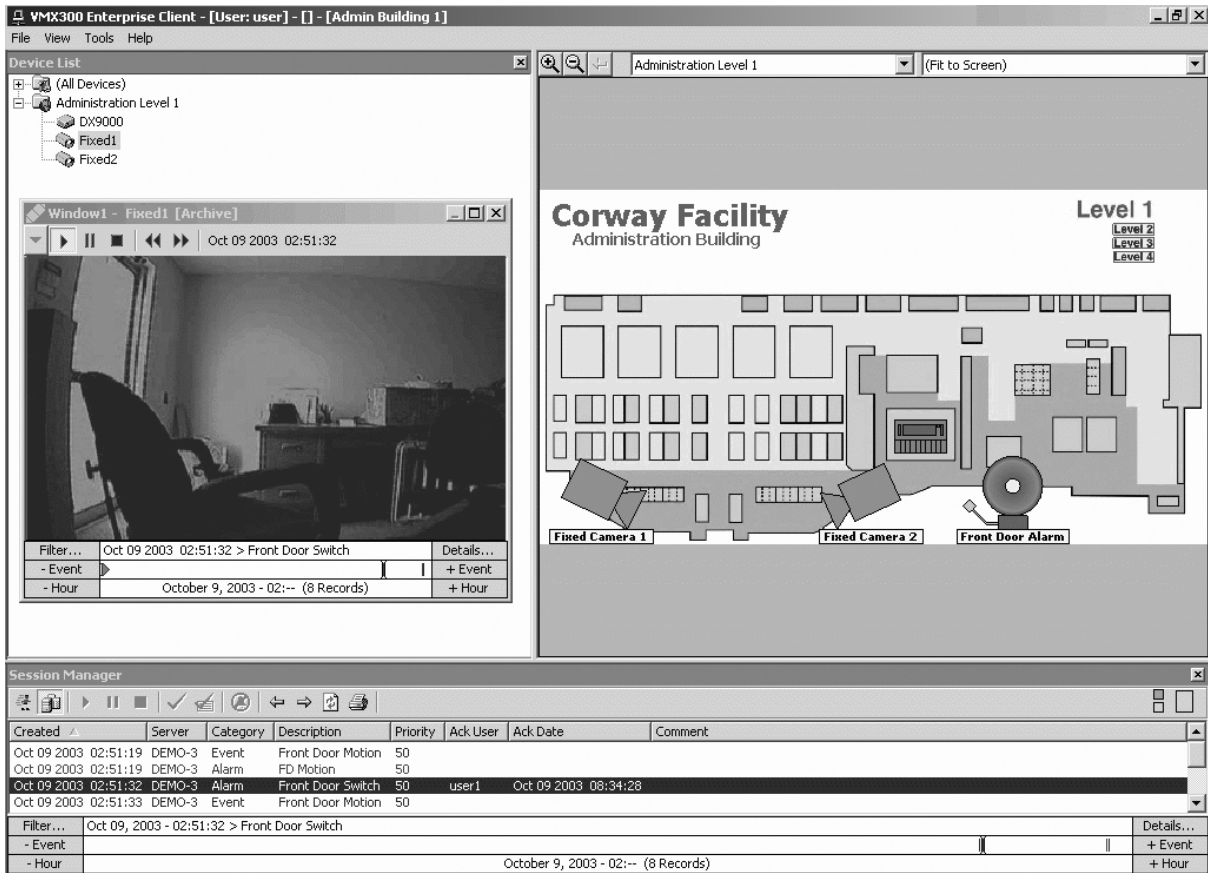


Figure 113. Session Manager

The easiest way to locate an archive is to zero in on the date/time of the archive as closely as you can, and then browse or filter the retrieved archives:

1. Select a date/time as close to the date/time of the archive as possible, either by building a date/time from the year down, or by zooming to a time unit. Refer to *Building a Date/Time* and *Zooming to a Time Unit* for instructions. The selected date/time appears in the bottom row of the Event Picker.

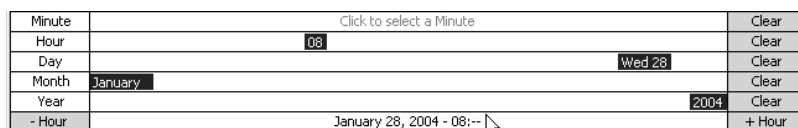


Figure 114. Sample Event Picker Date and Time Selection

2. Click the date/time in the bottom row of the Event Picker. VMX300(-E) retrieves the archives for the time period selected.

Video: If you are using the Event Picker in a custom window and a camera is switched to the window, VMX300(-E) automatically loads and plays the archived video for that camera, cued to the date/time selected in the Event Picker. Rewind or advance the video using the tools in the gadget to locate the video you want. Refer to *Custom Windows - Viewing Archived Video* for more information.

Alarms and events: If you are using the Event Picker in Session Manager Archive View, details of the retrieved events are listed in the Session Manager window, above the Event Picker.

VMX300(-E) retrieves the archived events for the time period selected. For example, if you specified a date/time down to the hour, all archived events for that hour appear.

Created	Server	Category	Description	Priority	Ack User	Ack Date	Comment
Jan 28 2004 08:54:36	Corway Faci...	Alarm	Fire Exit Breached	80			
Jan 28 2004 08:54:28	Corway Faci...	Alarm	Camera Comm Loss...	60			
Jan 28 2004 08:54:13	Corway Faci...	Alarm	Camera Comm Loss	60	operator	Jan 28 2004 08:57:28	
Jan 28 2004 08:48:17	Corway Faci...	Alarm	Camera Comm Loss	60	operator	Jan 28 2004 08:49:39	
Jan 28 2004 08:47:38	Corway Faci...	Alarm	Fire Exit Breached	80	operator	Jan 28 2004 08:49:32	Visitor inadve
Jan 28 2004 08:38:39	Corway Faci...	Alarm	Fire Exit Breached	80			
Jan 28 2004 08:38:23	Corway Faci...	Alarm	Camera Comm Loss	50			

Filter...	Jan 28 2004 08:38:23 > Camera Comm Loss	Details...
- Event		+ Event
- Hour	January 28, 2004 - 08:-- (7 Records)	+ Hour

Figure 115. Using the Event Picker in Session Manager Archive View

Browse or filter the archived events to locate the ones you want. Refer to *Browsing Archived Alarms and Events* and *Filtering Archived Alarms and Events* for instructions.

View the details of archived events. Refer to *Archive View* for instructions.

Picker: Each archived alarm or event is represented in the Event Picker as a small vertical bar in the Event row. The number of retrieved events is given in the bottom row between parentheses.

Filter...	Jan 28 2004 08:38:23 > Camera Comm Loss	Details...
- Event		+ Event
- Hour	January 28, 2004 - 08:-- (7 Records)	+ Hour

Figure 116. Sample Event Picker Date and Time Selection

The double vertical bar in the Event row is the Picker, which indicates the selected event. The date/time and description of the selected event appears in the top row of the Event Picker. Drag the Picker to the left or right to change the Event Picker date/time and to select a different event. Alternatively, click - Event or + Event to jump the Picker to the previous event or next event.

When you are using the Event Picker in a custom window, the time displayed in the top row of the Event Picker depends on the cursor mode. Refer to *Custom Windows - Viewing Archived Video - Cursor Mode* for more information.

BUILDING A DATE/TIME

The Event Picker's date/time selector allows you to build a date/time from scratch starting with the year, then the month, then the day, then the hour, down to the minute. You do not need to narrow down the date/time to the minute. Narrow it down as much as you can, then retrieve the archives and work from there: browse or filter to locate events, or rewind and advance the video to locate the recording you are looking for.

The date/time you are building displays in the bottom row of the date/time selector as you build it.

Build a date/time as follows:

1. If Click to Select a Date/Time does not appear in the bottom row of the Event Picker, right-click the Event Picker and select Clear from the pop-up menu. Click to Select a Date/Time appears in the bottom row of the Event Picker.

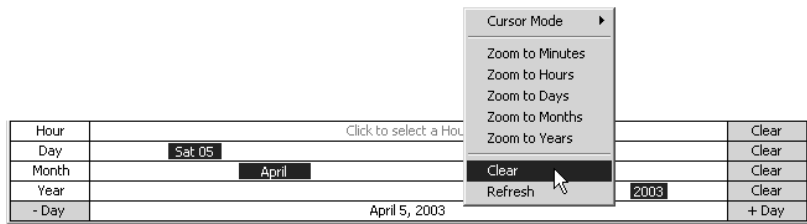


Figure 117. Clearing the Event Picker

- Click anywhere on the bottom row of the Event Picker. The Year row appears above the bottom row.

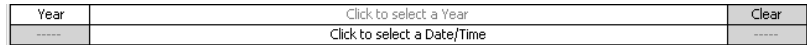


Figure 118. Selecting the Year

- Click anywhere on the Year row. A year appears in the Year row as well as in the bottom row. The bottom row has - Year at the left end and + Year at the right end. The Month row appears above the Year row.

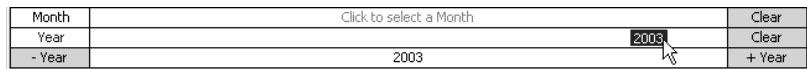


Figure 119. Selecting the Month

- Continue clicking across the Year row until you locate the year you want. Years are distributed across the row with the current year at the extreme right. Alternatively, click - Year and + Year, or use the mouse wheel to change the year. The selected year appears in the Year row and the bottom row.
- If you know what month of archive you want to view, click on the Month row. Otherwise, continue at step 8. The selected month appears in the Month row as well as in the date you are building in the bottom row. The bottom row has - Month at the left end and + Month at the right end. The Day row appears above the Month row.
- Continue clicking across the Month row until you locate the month you want. Months are distributed across the row, with the current month at the extreme right. Alternatively, click - Month and + Month, or use the mouse wheel to change the month. The selected month appears in the Month row and the bottom row.
- Continue building the date until you have narrowed it down as much as you can. Select the day if you know the day, the hour if you know the hour, and the minute if you know the minute. The date/time you have built appear in the bottom row.

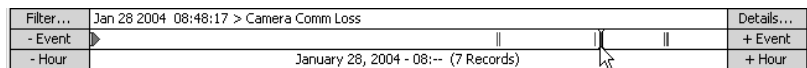


Figure 120. Sample Event Picker Date and Time

- Click the date/time in the bottom row of the date/time selector. VMX300(-E) retrieves the archives for the time period selected. Refer to the beginning of the *Event Picker* section for information on how the Event Picker displays retrieved events.

Video: If you are using the Event Picker in a custom window and a camera is switched to the window, VMX300(-E) will automatically load and play the archived video for that camera, cued to the date/time selected in the Event Picker. Rewind or advance the video using the tools in the gadget to locate the video you want. Refer to *Custom Windows - Viewing Archived Video* for more information.

Alarms and events: If you are using the Event Picker in Session Manager Archive View, details of the retrieved events will be listed in the Session Manager window, above the Event Picker.

VMX300(-E) retrieves the archived events for the time period selected. For example, if you specified a date/time down to the hour, all archived events for that hour will display.

Browse or filter the archived events to locate the ones you want. Refer to *Session Manager - Browsing Archived Alarms and Events* and *Filtering Archived Alarms and Events* for instructions.

View the details of archived events. Refer to *Session Manager - Archive View* for instructions.

NOTES:

- You can back out of a date you are building by clicking Clear at the right end of any row in the Event Picker. For example, if you have narrowed down a date to the minute, clicking Clear at the end of the Day row will clear the minute, hour, and day, leaving just the month and year.
- You cannot select a date/time in the future. If you click a future date/time, the Event Picker will select the current date/time.

ZOOMING TO A TIME UNIT

The Event Picker has a pop-up menu with options that allow you to zoom to a time unit. Right-click the Event Picker's bottom row to open the pop-up menu. Table N describes the menu options.



Figure 121. Event Picker Pop-up Menu

The options perform a different action depending on whether an event is already selected or not. If no event is selected, the zoom options zoom to the current date/time. If an event is selected, the zoom options zoom to the selected time unit for the event. For example, Zoom to Hours zooms to the hour of the event.

Table N. Event Picker Pop-up Menu Options

MENU OPTION	USE
Cursor Mode	Determines what date/time is displayed in the top row of the Event Picker. The Cursor Mode option is only available when you are using the Event Picker in a custom window. Refer to <i>Custom Windows - Viewing Archived Video - Cursor Mode</i> for more information.
Zoom to Minutes	If no event is selected, displays the current date/time down to the minute in the bottom row of the date/time selector. If an event is selected, lists all the events archived in the same minute as the selected event.
Zoom to Hours	If no event is selected, displays the current date/time down to the hour in the bottom row of the date/time selector. If an event is selected, lists all the events archived in the same hour as the selected event.
Zoom to Days	If no event is selected, displays the current date/time down to the day in the bottom row of the date/time selector. If an event is selected, lists all the events archived in the same day as the selected event.
Zoom to Months	If no event is selected, displays the current month and year in the bottom row of the date/time selector. If an event is selected, lists all the events archived in the same month as the selected event.
Zoom to Years	If no event is selected, displays the current year in the bottom row of the date/time selector. If an event is selected, lists all the events archived in the same year as the selected event.
Clear	Deselect the currently selected event, if there is one.
Refresh	Update the list of events. Useful for viewing newly archived events. This option is the same as the Refresh button in the Session Manager tool bar.

Session Manager

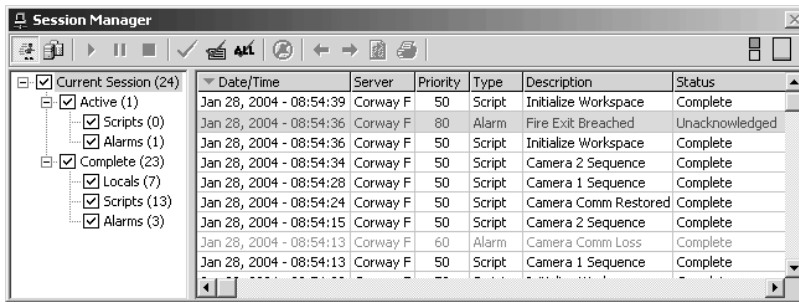


Figure 122. Session Manager

The Session Manager records activities as they occur in the VMX300(-E) system. Depending on how your system administrator has set up the system, this can include both activities initiated by you and activities initiated by another operator or by the system.

Session Manager has two views:

- Session View
- Archive View

Session View allows you to manage activities that occurred during your current session, including alarms that might require your acknowledgement. Archive View allows you to retrieve and view archived events.

Status on log in: When you log in, VMX300(-E) provides you with an accurate reflection of the current state of the system. Schedules in the process of executing and alarms waiting for acknowledgement will appear as active entries in the Session Manager, even if they were initiated before you logged in.

Access privileges: If the Session Manager does not appear in the View menu, you do not have permission to control its display. If the Session Manager is open, you cannot close it. If it is closed, you cannot open it.

Open and close session manager: To open the Session Manager window, click View > Session Manager. To close the Session Manager, click the Close button in the right corner of the window's title bar, or clear View > Session Manager.

Alternatively, if you have permission to edit workspaces, you can open and close the Session Manager window using the Edit Workspace option of the File menu. For information on adjusting the size and position of the Session Manager window, refer to *Workspaces* and the *Appendix*.

Components: The Session Manager has the following components:

- Title bar
- Tool bar
- Management area for Session View and Archive View

Title Bar

In addition to the title itself, the Session Manager title bar contains a standard Windows button for closing the Session Manager window, provided you have permission to edit workspaces. If the Session Manager window is undocked, there are also standard Windows buttons for minimizing and maximizing the window.

Tool Bar



Figure 123. Session Manager Tool Bar

The Session Manager tool bar has the buttons listed in Table O. Some of the buttons are available in Session View and others are available in Archive View. For more information on using the Session View buttons, refer to *Alarms and Events*. For information on Archive View buttons, refer to *Archive View*.

Table 0. Session Manager Buttons

BUTTON	AVAILABLE	USE
Session View	Session View	Display the activities for your current session.
Archive View	Session View	Display events from previous sessions and the current session that are archived.
Resume	Session View	Resume a script that you paused using the Pause button.
Pause	Session View	Pause a script that is running.
Stop	Session View	Stop a script that is running.
Acknowledge	Session View	Acknowledge the alarm or event highlighted in the activities list.
Acknowledge with Comment	Session View	Acknowledge the alarm or event highlighted in the activities list and record a comment.
Acknowledge All	Session View	Acknowledge all events that do not require a comment.
Silence Alarm	Session View	Stop a continuous alarm sound.
Previous Event	Archive View	Select the alarm or event one higher in the list.
Next Event	Archive View	Select the alarm or event one lower in the list.
Refresh	Archive View	Update the list of archived events.
Print	Archive View	Print the list of archived events.

Servers Connected

In addition to the buttons, which appear at the left end of the Session Manager tool bar, the tool bar has indicators that actively monitor server connections and workstation CPU usage.

Each server in the Configured Servers list is represented by a square, or, for systems that are licensed to use backup servers, a pair of squares, one on top of the other. The top square represents the primary server and the bottom square represents the backup server. Refer to *Configuring Servers* for more information on configured servers.

Position the pointer over a square to see the name of the server that square represents. The color of the square represents the current state of the connection:

- Green indicates that the client you are logged in to is connected to the server.
- Yellow indicates that the client you are logged in to is in the process of connecting to the server, or being synchronized with the server.
- Red indicates that the client has lost the connection to the server.
- Blank indicates that the administrator has not designated a backup server for the primary server.

CPU Usage

The rectangle at the right end of the Session Manager tool bar represents the CPU usage of the workstation you are logged in to. As usage increases, the rectangle fills with color from the bottom. Position the pointer over the rectangle to see a dynamic numeric readout of the percent CPU usage.

SESSION VIEW

Use Session View to view activities that are in the process of being performed or have been performed during your current session.



To go into Session View, click the Session View button on the tool bar.

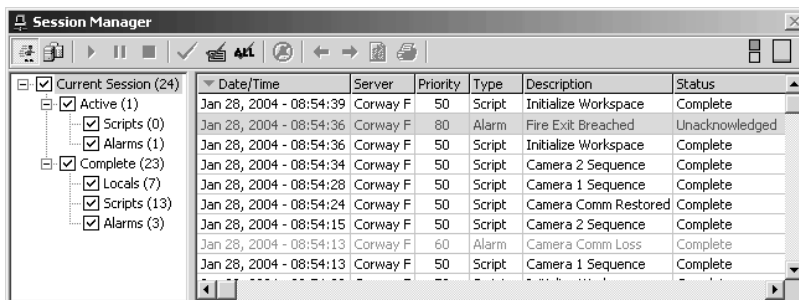


Figure 124. Session Manager

CURRENT SESSION TREE

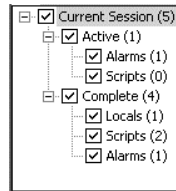


Figure 125. Current Session Tree

The Current Session tree categorizes your current session's activities. Active activities are those that are in the process of being performed. Complete activities have been completed.

You can select the activities you want listed in the right pane of the Session Manager by selecting each category you want to view. To see activities that are in the process of being performed, select Active. To see activities that have been performed during your current session, select Complete. The number in parentheses to the right of a category indicates the total number of activities in that category.

TIP: In general, an operator's interest is in active entries rather than complete ones. To view active entries only, select Active and clear Complete.

ACTIVITIES LIST

The activities list in the right pane of the Session Manager lists all activities of the types selected in the Current Session tree. Entries are dynamically added to the list as activities occur.

Date/Time	Server	Priority	Type	Description	Status
Jan 28, 2004 - 08:54:39	Corway F	50	Script	Initialize Workspace	Complete
Jan 28, 2004 - 08:54:36	Corway F	80	Alarm	Fire Exit Breached	Unacknowledged
Jan 28, 2004 - 08:54:36	Corway F	50	Script	Initialize Workspace	Complete
Jan 28, 2004 - 08:54:34	Corway F	50	Script	Camera 2 Sequence	Complete
Jan 28, 2004 - 08:54:28	Corway F	50	Script	Camera 1 Sequence	Complete
Jan 28, 2004 - 08:54:24	Corway F	50	Script	Camera Comm Restored	Complete
Jan 28, 2004 - 08:54:15	Corway F	50	Script	Camera 2 Sequence	Complete
Jan 28, 2004 - 08:54:13	Corway F	60	Alarm	Camera Comm Loss	Complete
Jan 28, 2004 - 08:54:13	Corway F	50	Script	Camera 1 Sequence	Complete

Figure 126. Session Manager - Activities List

Sort list: To sort the activities list chronologically, click the Date/Time column header. The arrow in the column header indicates that the list is sorted by date/time.

If the list is sorted with the most recent activity at the top of the list, new entries are added to the top of the list. If the list is sorted with the oldest activity at the top, new entries are added to the bottom of the list.

You can also sort the activities list on Server, Priority, or Type by clicking the appropriate column header.

By selecting an entry in the activities list, you can perform the following tasks:

- Replay an alarm's script
- Acknowledge an alarm
- Pause, resume or stop a running script

For more information on replaying and acknowledging an activity, refer to *Alarms and Events - Replaying an Alarm* and *Acknowledging an Alarm*.

Managing scripts: To interrupt a script that is running:

1. Click the entry for the script in the activities list. The entry is highlighted.
2. Use the buttons on the Session Manager tool bar to pause, resume, or stop the script:



a. **Pause:** Click the Pause button to temporarily stop the script.



b. **Resume:** Click the Resume button to resume a script that you paused using the Pause button.



c. **Stop:** Click the Stop button to stop the script.

ARCHIVE VIEW

Use Archive View to view events that are archived.



To go into Archive View, click the Archive View button on the tool bar.

Created	Server	Category	Description	Priority	Ack User	Ack Date	Comment
Jan 28 2004 08:54:36	Corway Faci...	Alarm	Fire Exit Breached	80			
Jan 28 2004 08:54:28	Corway Faci...	Alarm	Camera Comm Loss...	60			
Jan 28 2004 08:54:13	Corway Faci...	Alarm	Camera Comm Loss	60	operator	Jan 28 2004 08:57:28	
Jan 28 2004 08:48:17	Corway Faci...	Alarm	Camera Comm Loss	60	operator	Jan 28 2004 08:49:39	
Jan 28 2004 08:47:38	Corway Faci...	Alarm	Fire Exit Breached	80	operator	Jan 28 2004 08:49:32	Visitor inadve...
Jan 28 2004 08:38:39	Corway Faci...	Alarm	Fire Exit Breached	50			
Jan 28 2004 08:38:23	Corway Faci...	Alarm	Camera Comm Loss	50			

Filter...	Jan 28 2004 08:38:23 > Camera Comm Loss	Details...
- Event		+ Event
- Hour	January 28, 2004 - 08:-- (7 Records)	+ Hour

Figure 127. Session Manager - Archive View

In Archive View, the bottom part of the Session Manager Window is taken up by the Event Picker. Use the Event Picker to locate and retrieve archived events. Refer to *Event Picker* for instructions.

NOTE: To view archived events, the archive server must be running. If the text in the bottom row of the Event Picker is flashing, and continues to flash without stopping, the archive server is not running. Notify your system administrator. The text flashes temporarily when archives are being retrieved from the server.

The events you have retrieved using the Event Picker are listed in the Session Manager window, above the Event Picker. If you are looking for a particular event or group of events, browse or filter the events. Refer to *Browsing Archived Alarms and Events* and *Filtering Archived Alarms and Events* for instructions.

Archived events have the following information:

- **Created:** Date and time the event was triggered
- **Server:** Server on which the event is defined
- **Category:** Alarm/event category the event belongs to
- **Description:** Description of the event
- **Priority:** The event's priority
- **ACK user:** User or server who acknowledged the event
- **ACK date:** Date and time the event was acknowledged
- **Comment:** Comments entered by the operator who acknowledged the event

Sort list: To sort the list of retrieved events chronologically, click the Created column header. The arrow in the column header indicates that the list is sorted by date/time. You can also sort the list on any of the other columns by clicking the appropriate column header.



Refresh list: Use the Refresh button in the Session Manager tool bar to update the list of events. This will add any newly archived events to the list. This option is the same as the Refresh option in the Event Picker pop-up menu.



Print list: Use the Print button in the Session Manager tool bar to print the list of archived events you have retrieved. If you filter the list, only the filtered events are printed. Refer to *Filtering Archived Alarms and Events* for information on filtering.

Details: Each entry in the list of retrieved events takes up one line. In some cases, this does not provide enough room to see the entire record, particularly if the description or comment is wordy. To view an archived event in its entirety:

Double-click the event in the list, or select the event and click Details in the upper right corner of the Event Picker.

The Alarm Properties dialog box opens. The Alarm Properties dialog box displays the same information as the list of retrieved events. Only the format of displaying the information is different.

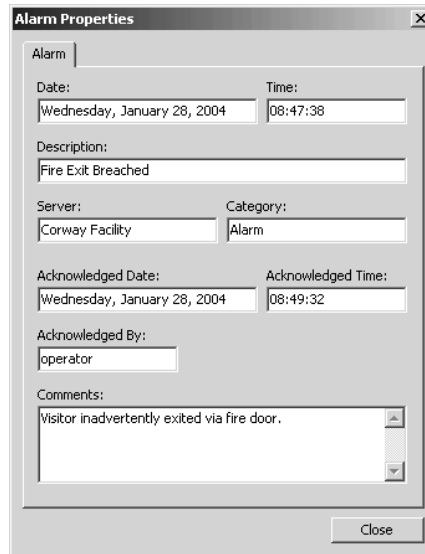


Figure 128. Sample Archived Event - Details

BROWSING ARCHIVED ALARMS AND EVENTS

Once you have retrieved archives, you can browse through them, as follows:

1. **Select event:** Select an event by clicking the event in the list of retrieved events. Alternatively, click the event's bar in the Event row of the Event Picker. Your selection is highlighted both in the list and in the Event Picker. The date/time the event was archived and its description appear in the top row of the Event Picker.
2. **Non-adjacent event:** Move directly to another event by scrolling the list and clicking the event. Alternatively, click the event's bar in the Event row of the Event Picker, or drag the Picker to the event's bar.

Filter...	Jan 28 2004 08:38:23 > Camera Comm Loss	Details...
- Event		+ Event
- Hour	January 28, 2004 - 08:-- (7 Records)	+ Hour

Figure 129. Browsing Archived Alarms and Events

3. **Adjacent event:** Step through events:
 - a. **Next event:** Go to the next event by clicking the Select Next Event button in the Session Manager tool bar. Alternatively, click + Event at the right of the Event row in the Event Picker. You cannot step to an event outside the selected time range.
 - b. **Previous event:** Go to the previous event by clicking the Select Previous Event button in the Session Manager tool bar. Alternatively, click - Event at the left of the Event row. You cannot step to an event outside the selected time range.
4. **Reduce number of events retrieved:** Retrieving a large number of events from the archive server slows the retrieval process. To reduce the number of events retrieved, zoom to a smaller time unit. To increase the number of events retrieved, zoom to a larger time unit. Refer to *Event Picker - Zooming to a Time Unit* for instructions.

FILTERING ARCHIVED ALARMS AND EVENTS

The filter option allows you to filter out archived events you do not want displayed by specifying criteria each displayed event must match. Filtering does not affect the number of records retrieved from the archive server. It only affects which events are displayed in the Session Manager.

You can filter on one or more of the following things:

- Server the event is defined on
- Alarm/event category

- User who acknowledged the event
- Source device associated with the event
- Event description
- Comments entered by the operator who acknowledged the event
- Event priority

By default, when you first retrieve events from the archive server, no events are filtered out. In other words, a complete list of archived events for the selected date/time is displayed in the Session Manager. When a filter has been applied, an asterisk appears beside Filter in the Event Picker.

*Filter...	Jan 28 2004 08:47:38 > Fire Exit Breached	Details...
- Event		+ Event
- Day	January 28, 2004 (8 Records)	+ Day

Figure 130. Filtering Archived Alarms and Events

To filter the events displayed:

1. Click Filter at the left side of the Event Picker. The Filter dialog box opens. If you have filtered events before, the settings for the previous filter appear.
2. **Clear all:** If a previous filter is in place and you want to reset all the settings to their default values, click Clear All, then click Apply. The settings are reset to their default values.
3. **Servers tab:** If you want to filter on server, click the Servers tab and select each server whose events you want displayed. You can only filter on servers you are currently connected to. Clear any servers whose events you do not want displayed.

To display the events from all the servers you are connected to, select Any Server.



Figure 131. Filter Dialog Box - Servers Tab

4. **Categories tab:** If you want to filter on alarm/event category, click the Categories tab and select each category you want displayed. For example, to display events belonging to the Door Alarms category only, select Door Alarms.

You can only filter on alarm/event categories defined on servers you are currently connected to. Your system administrator should instruct you in what categories there are, and what each category represents. Clear any categories you do not want displayed.

To display the events belonging to all alarm/event categories, select Any Category.

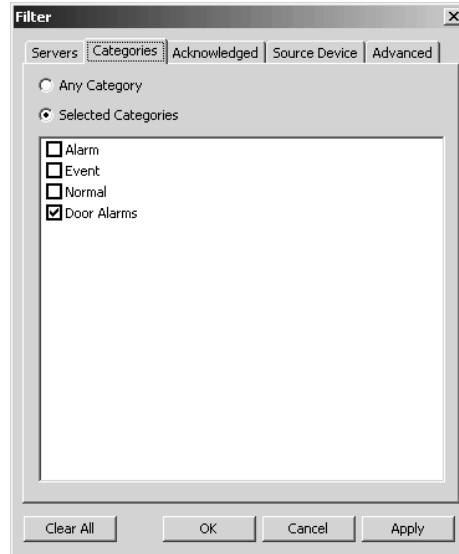


Figure 132. Filter Dialog Box - Categories Tab

5. **Acknowledged tab:** If you want to filter on events acknowledged by particular users, click the Acknowledged tab and select each user whose events you want displayed. For example, to display events acknowledged by the users 'user' and 'operator', select User and Operator.

You can also filter on events that were automatically acknowledged by a server. The server appears in the list with the users. Clear any users and servers you do not want displayed.

To display all events, no matter who acknowledged it, select All Records.

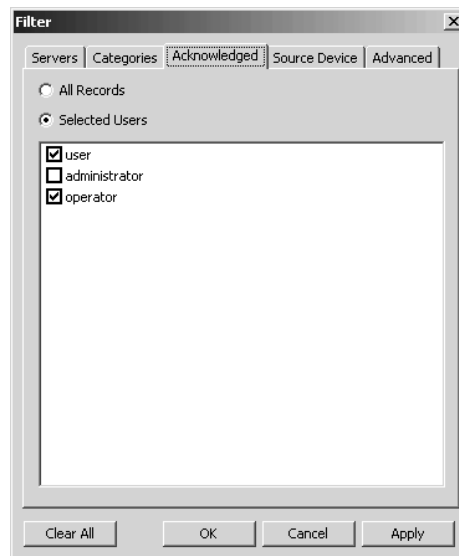


Figure 133. Filter Dialog Box - Acknowledged Tab

6. **Source device tab:** If you want to filter on devices associated with events, click the Source Device tab and select each camera whose events you want displayed. For example, to display only those events associated with Fire Exit Camera, select Fire Exit Camera.

Clear any users and servers you do not want displayed. To display all events, regardless of whether they are associated with a camera, select All Records.

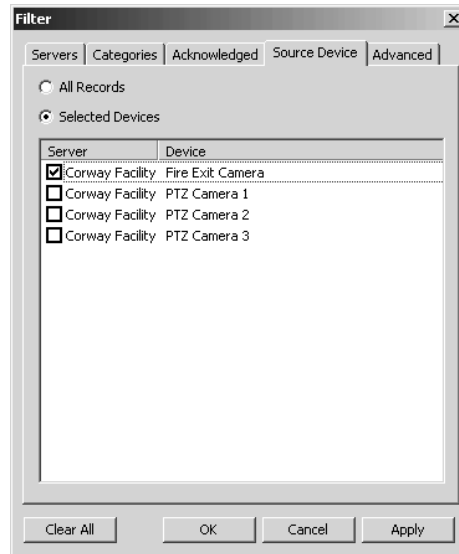


Figure 134. Filter Dialog Box - Source Device Tab

7. **Advanced tab:** To filter on the event description, the comments entered by the operator who acknowledged the event, and/or on the event's priority, click the Advanced tab.

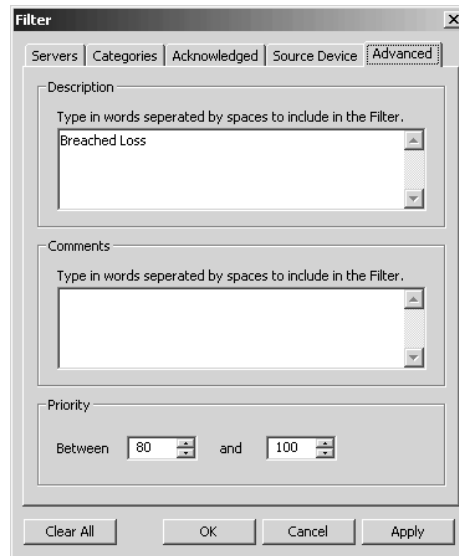


Figure 135. Filter Dialog Box - Advanced Tab

- a. **Description:** If you want to filter on description, type each keyword that must be in an event's description for the event to be displayed. Archived events that match any part of the keywords are displayed.
 Keywords cannot contain single or double quotation marks.
 Keywords are not case sensitive. For example, if you type **exit**, an event with **EXIT** in its description appears.
- b. **Comments:** If you want to filter on the comments entered by the operator who acknowledged the event, type in each keyword that must be in an event's comment for the event to be displayed. Archived events that match any part of the keywords are displayed.
 Keywords cannot contain single or double quotation marks.
 Keywords are not case sensitive. For example, if you type **memo**, an event with **MEMO** in its comment appears.

- c. **Priority:** If you want to filter on the event priority, enter the lowest and highest priorities you want displayed.
8. Filter the list using one of the following methods:
 - a. Click Apply to display the filtered list without closing the Filter dialog box. Use this method if you want to apply another filter. Click OK or Cancel when done.
 - b. Click OK to display the filtered list and close the Filter dialog box.
9. **Remove filter:** When a filter is in effect, the filtered list appears in the Session Manager and an asterisk appears beside Filter in the Event Picker. To remove the filter and return to the full list of retrieved events, in the Filter dialog box, click Clear All, and then click Apply. The full list of retrieved events appears and the asterisk disappears from the Event Picker.

Schedules

Your system administrator has the ability to define scripts that run at scheduled times. For example, the system administrator might define a script that automatically sets a camera to night mode every day at dusk.

Depending on the specific role you play as an operator of the VMX300(-E) system, you might be notified of schedules as they occur. Notification is done through the Session Manager.

NOTE: Schedules are highly customizable. Your system administrator should instruct you in what events are defined and how you are expected to respond to them.

STATUS ON LOG IN: When you log in, VMX300(-E) provides you with an accurate reflection of the current state of the system. Schedules in the process of executing will appear as active entries in the Session Manager, even if they were initiated before you logged in.

HOW SCHEDULES WORK

WHEN A SCHEDULE EXECUTES

If your system administrator has designated you to receive notification of schedules, you will see several things happen when the schedule executes:

- A script defined by the system administrator runs.
- An entry for the schedule appears in the Session Manager.
- The entry for a schedule that requires a response is automatically highlighted in the activities list, provided you do not already have an active entry highlighted. An active entry is any entry that does not have status Complete. If you already have an active entry highlighted, the new entry will not be highlighted. This ensures that your current selection is not overridden; the system respects your selection by leaving your entry highlighted.
- If your system administrator wants you to respond to the schedule, a custom prompt defined by the system administrator will appear on your workstation. Prompts can appear, disappear, and reappear on your workstation. The administrator can define the prompt to be removed from your workstation and displayed on another operator's workstation if you do not respond quickly enough. If no other operator has responded in the allotted time, the prompt can reappear on your workstation.

RESPONDING TO A SCHEDULE

If a schedule requires a response, its entry in the Session Manager remains active until the event has been acknowledged. Only one operator needs to respond to a schedule. If several operators are notified, the event is considered acknowledged once the system receives a response from any one of the recipients.

To respond to a schedule, click one of the prompt buttons.

Once a schedule has been acknowledged and its script has finished running:

- The status of the entry in the Session Manager becomes Complete.
- The entry for the completed event is no longer highlighted.
- The highest active entry in the activities list becomes highlighted. Exactly which entry this is depends on how the activities are sorted.

Alarms and Events

Your system administrator has the ability to specify conditions within the system that require some kind of response. Within VMX300(-E), these conditions and the response they require are called 'alarms and events', referred to as 'alarms' or 'events' for short. For example, the system administrator might define an alarm that is triggered when communications with a camera are lost.

Depending on the specific role you play as an operator of the VMX300(-E) system, you might be notified of alarms as they occur. Notification is done through the Session Manager, and optionally through alarm icons placed on maps. The Session Manager provides tools to help you respond to incoming alarms.

Your system administrator can customize alarms as follows:



- **Alarm icons:** The system administrator can place icons representing the alarms he has defined on maps. Alarms icons become animated and change color to visually alert you of the alarm state.
- **Color:** The system administrator can specify different colors for when an alarm is triggered and when it is acknowledged. Alarm entries in the Session Manager and alarm icons appear in the selected colors.
- **Sound:** The system administrator can provide a sound that plays, once or continuously, when an alarm is triggered.
- **Recipient groups:** The system administrator can define groups of users who are notified of alarms when they are triggered.
- **Acknowledgement:** The system administrator can require that an operator acknowledge an alarm, optionally with a comment. Depending on how the system administrator has defined the alarm, acknowledgement is done either using one of the acknowledgement tools provided by the Session Manager, or by responding to a custom prompt that appears on your workstation.
- **Automated actions:** The system administrator can write scripts that automatically run when an alarm is triggered, replayed, or acknowledged.

NOTE: Alarms are highly customizable. Your system administrator should instruct you in what alarms are defined and how you are expected to respond to them.

HOW ALARMS AND EVENTS WORK

WHEN AN ALARM OR EVENT IS TRIGGERED

If your system administrator has designated you to receive notification of alarms, you will see several things happen when the condition that triggers an alarm becomes true. Exactly what happens depends on how the system administrator has customized the alarm. Any or all of the following could happen when an alarm is triggered:



- The alarm icon changes to the alarm color and becomes animated (the bell hammer strikes the bell).
- A script defined by the system administrator runs.
- The Alarms branch of the Current Session tree is automatically selected.
- Operators are notified of the alarm by e-mail.
- An entry recording the alarm appears in the Session Manager. The entry displays in the same color as the alarm icon. If an alarm is triggered more than once in quick succession, a new entry appears in your Session Manager each time the alarm is triggered.
- If you do not have an active entry highlighted in the Session Manager when the alarm is triggered, then the entry for the new alarm is automatically highlighted and the replay script runs. An active entry is any entry that does not have status Complete. If you already have an active entry highlighted in the Session Manager, the new entry will not be highlighted. This ensures that your current selection is not overridden; the system respects your selection by leaving your entry highlighted.
- If acknowledgement is required, Acknowledge, Acknowledge with Comment, and/or Acknowledge All become available on the Session Manager tool bar and in the alarm icon pop-up menu. If the system administrator wants you to acknowledge the alarm by responding to a prompt, the prompt will appear on your workstation. Note that prompts can appear, disappear, and reappear on your workstation. The administrator can define the prompt to be removed from your workstation and displayed on another operator's workstation if you do not respond quickly enough. If no other operator has responded in the allotted time, the prompt can reappear on your workstation.
- The alarm sound plays, once or continuously. If the sound plays continuously, you can turn it off by clicking the Silence Alarm button on the Session Manager tool bar.
- If your system administrator is archiving alarms, the entry is recorded in the archives.

When the condition that triggers an alarm becomes false again, the icon animation stops (the bell hammer stops striking the bell).

REPLAYING AN ALARM OR EVENT

You can “replay” the system’s response to an alarm by clicking the alarm entry in the Session Manager activities list. This causes one of the scripts defined by the system administrator to run. You can replay an alarm as many times as you want, no matter what the alarm’s status. Each time you replay the alarm, an entry recording the replay appears in the Session Manager. The entry displays in the alarm color.

Operator replays do not do any of the following things:

- Change the icon color
- Change the icon animation
- Play the alarm sound
- Require acknowledgement




Replaying an alarm runs the replay script on your workstation only. It does not affect the workstation of other operators.

ACKNOWLEDGING AN ALARM OR EVENT

If an alarm requires acknowledgement, the alarm entry in the Session Manager remains active until it has been acknowledged. Only one operator needs to respond to an alarm. If several operators are notified, the alarm is considered acknowledged once the system receives acknowledgement from any one of the recipients.

Depending on how the system administrator has defined an alarm, you acknowledge the alarm either by responding to a custom prompt that appears on your workstation, or by using one of the acknowledgement tools provided by the Session Manager.

To acknowledge an alarm using Session Manager tools, use one of the following methods:

-  • Highlight the alarm entry in the activities list and click the Acknowledge button or Acknowledge with Comment button on the Session Manager tool bar.
-  • Right-click the alarm icon and select Acknowledge or Acknowledge with Comment from the pop-up menu. If the alarm has been triggered more than once in quick succession, creating multiple entries in the Session Manager, this acknowledges every instance of the alarm.
-  • Click the Acknowledge All button on the Session Manager tool bar. This acknowledges all alarms that do not require a comment.

If the alarm requires a comment, a window will open to allow you to type in your comment.

When an alarm is acknowledged, the following events occur:

- The entry in the Session Manager and the alarm icon change back to the default color to indicate the alarm has been handled.
- If the system administrator has defined an acknowledgement script, it runs.

WHEN AN ALARM OR EVENT BECOMES COMPLETE

Once an alarm has been acknowledged and its scripts have finished running, the status of the entry in the Session Manager is set to Complete. When an alarm or event becomes complete, the following events occur:

- If the alarm did not require acknowledgement, its entry in the Session Manager and the alarm icon change back to the default color.
- The entry for the alarm is no longer highlighted.
- The highest active entry in the activities list becomes highlighted. Exactly which entry this is depends on how the activities are sorted.

Server Status

The Server Status window lists the name, IP address, port number, and status of the servers you are connected to. Open the Server Status window to check the status of your connections to servers.

To open the Server Status window, click View > Server Status. To close the Server Status window, click the Close button in the right corner of the window's title bar, or clear Server Status in the View menu.

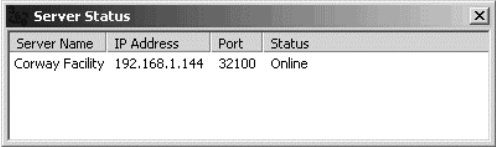



Figure 136. Server Status window

Remote Desktop Servers

Remote desktop servers enable you to control a workstation remotely through a custom window. Refer to *Custom Windows - Viewing a Remote PC* for instructions on connecting to a PC (workstation) that has a remote desktop server running on it.

To control a workstation remotely, a remote desktop server must be running on the workstation that being accessed remotely. Any workstation on the network can run a remote desktop server, including a workstation that has the VMX300(-E) server application or client application running on it.

 **TIP:** You can configure a VMX300(-E) server remotely from a client by having a remote desktop server running on the computer the server is installed on.

STARTING A REMOTE DESKTOP SERVER

When you start a remote desktop server, you have the choice of running it as an executable or as a service. If you ever have to restart a remote desktop server that is run as an executable, you will have to follow the steps outlined here. To restart a remote desktop server that is run as a service, restart the workstation the driver is installed on, or start the server through the Windows Control Panel Administrative Tools.

To start a remote desktop server:

1. Run the remote desktop server application from the Windows Start menu, or double-click the remote desktop server icon on the Windows desktop, if there is one. The Configure Remote Desktop Server dialog box opens.



Figure 137. Configure Remote Desktop Server Dialog Box

2. If the server is currently installed to run as a service and you want to run it as an executable, click Remove service, then click OK. Repeat step 1 to re-open the Configure Remote Desktop Server dialog box.
3. **Port:** Enter the port you want used by clients connecting to the remote desktop server, or select the port from the drop-down list.
4. **Mode:**
 - a. **Executable:** To run the remote desktop server as an executable, click Run as an executable.
 - b. **Service:** To run the remote desktop server as a service, click Install as a service.
5. **Options:** Click Options to specify a password that must be entered to connect remotely to the computer. You can change the password at any time without shutting down the server. Refer to *Setting Remote Desktop Server Options* for instructions.
6. Click OK. The Configure Remote Desktop Server dialog box closes. If you are running the server as a service, start the server through the Windows Control Panel Administrative Tools, or restart the computer the remote desktop server application is installed on and the server will start automatically. An icon representing the remote desktop server appears in the Windows system tray, indicating that the server is running.

SETTING REMOTE DESKTOP SERVER OPTIONS

To set the settings of a remote desktop server:

1. Right-click the remote desktop server icon in the Windows system tray and select Show from the pop-up menu. The Remote Desktop Server dialog box will open.

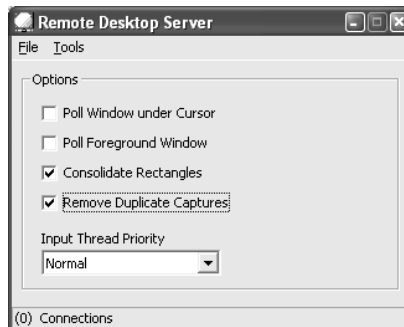


Figure 138. Remote Desktop Server Dialog Box

2. **Poll window under cursor:** If you want to be able to see fine changes in the remote window positioned under the cursor, such as a blinking cursor, select Poll Window under Cursor. Selecting this option degrades performance.
3. **Poll foreground window:** If you want to be able to see fine changes in the remote window positioned in the foreground, such as a blinking cursor, select Poll Foreground Window. Selecting this option degrades performance.
4. **Consolidate rectangles:** For troubleshooting purposes. Do not clear this option.
5. **Remove duplicate captures:** For troubleshooting purposes. Do not clear this option.
6. **Input thread priority:** For troubleshooting only. Do not use.
7. **Change password:** To change the password that must be entered to connect remotely to the workstation, click Tools > Options. The Options dialog box opens. Type the new password in the New Password box and again in the Confirm New Password box, and then click OK to close the Options dialog box.
8. **Close dialog box:** To close the Remote Desktop Server dialog box, right-click the remote desktop server icon in the Windows system tray and select Hide from the pop-up menu, or click the Minimize button at the right end of the title bar.

NOTE: Clicking the Close button at the right of the Remote Desktop Server title bar shuts down the remote desktop server. To keep the remote desktop server running after you have finished setting the polling options, minimize the window.

SHUTTING DOWN A REMOTE DESKTOP SERVER

To shut down a remote desktop server:

1. Right-click the remote desktop server icon in the Windows system tray and select Exit from the pop-up menu. Alternatively, select Show from the pop-up menu to open the Remote Desktop Server dialog box, then click File > Exit, or click the Close button at the right of the title bar. You are prompted for confirmation.
2. If you are sure you want to shut down the remote desktop server, click Yes. The remote desktop server shuts down.

NOTE: If the remote desktop server is running as a service, you can also shut it down through the Windows Control Panel Administrative Tools.

Appendix: Adjusting the Display

ADJUSTING DOCKABLE WINDOWS

The Device List window and the Session Manager window are the only two dockable windows in the VMX300(-E) client. When docked, they are locked in place at an edge of the Main window. When undocked, they can be moved about freely on the screen.

NOTE: To undock a window, you must belong to, and be logged in under, a user group that allows you to edit workspaces. Refer to *Editing a Workspace* for information on undocking windows.

ADJUSTING THE SIZE OF A DOCKED WINDOW

When a window is docked, you can only adjust its size along one dimension. To adjust the size of a docked window, position the pointer over the window's inside border. When the pointer changes to a double-headed resizing pointer, drag the border at right angles to the window's border. As you change the size of the docked window, other docked windows and the Main window automatically adjust to fill the available space.

DOCKING A WINDOW IN A DIFFERENT POSITION

If you have a workspace opened, docking is controlled through the workspace. Refer to *Editing a Workspace* for more information.

If you are not working with a workspace file, the Device List window and Session Manager window are automatically docked. You can dock them on a different edge of the Main window as follows:

1. Click the title bar of the window you want to move and hold the mouse key down.
2. Drag the pointer to the edge of the Main window where you want to move the window. A gray rectangle snaps to the edge of the Main window.
3. Release the mouse button. The window is docked in the space defined by the gray rectangle.

CLOSING A WINDOW

To close a window, click the Close button in the right corner of the window's title bar, or clear the window's name in the View menu. When you close a window, the map viewport expands to take up the available space.

To re-open a window, click its name in the View menu. The window will re-open in the same size and location as when it was closed.

RESIZING A WINDOW

Most undocked windows can be resized, including the Main window and custom windows.

You cannot resize a window when it is maximized, that is, when it fills the entire screen. If you want to resize a window that is maximized, first reduce it by clicking the Restore Down button in the right corner of the window's title bar or double-click the title bar.

- **Change the width:** Point to the left or right window border. When the pointer changes into a horizontal double-headed arrow, drag the border to the right or left.
- **Change the height:** Point to the top or bottom window border. When the pointer changes into a vertical double-headed arrow, drag the border up or down.
- **Change the width and height simultaneously:** Point to a corner of the window border. When the pointer changes into a diagonal double-headed arrow, drag the border in any direction.

NOTE: If the cursor does not change when it is positioned over a window border, then that window cannot be resized.

REPOSITIONING A WINDOW

To reposition a window, it must not be maximized, it must be undocked, and it cannot be locked in position by the workspace.

1. Position the pointer over the window's title bar.
2. Click the left mouse button and hold it down.
3. Drag the window to the desired location.

PRODUCT WARRANTY AND RETURN INFORMATION

WARRANTY

Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship **for a period of one year** after the date of shipment.

Exceptions to this warranty are as noted below:

- Five years on FT/FR8000 Series fiber optic products.
- Three years on Genex® Series products (multiplexers, server, and keyboard).
- Three years on Camclosure® and fixed camera models, except the CC3701H-2, CC3701H-2X, CC3751H-2, CC3651H-2X, MC3651H-2, and CC3651H-2X camera models, which have a five-year warranty.
- Two years on standard motorized or fixed focal length lenses.
- Two years on Legacy®, CM6700/CM6800/CM9700 Series matrix, and DF5/DF8 Series fixed dome products.
- Two years on Spectra®, Esprit®, ExSite™, and PS20 Scanners, including when used in continuous motion applications.
- Two years on Esprit® and WW5700 Series window wiper (excluding wiper blades).
- Eighteen months on DX Series digital video recorders, NVR300 Series network video recorders, and Endura™ Series distributed network-based video products.
- One year (except video heads) on video cassette recorders (VCRs). Video heads will be covered for a period of six months.
- Six months on all pan and tilts, scanners or preset lenses used in continuous motion applications (that is, preset scan, tour and auto scan modes).

Pelco will warrant all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to Pelco, Clovis, California. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental or consequential damages (including loss of use, loss of profit and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (559) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:

1. Model and serial number
2. Date of shipment, P.O. number, Sales Order number, or Pelco invoice number
3. Details of the defect or problem

If there is a dispute regarding the warranty of a product which does not fall under the warranty conditions stated above, please include a written explanation with the product when returned.

Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

RETURNS

In order to expedite parts returned to the factory for repair or credit, please call the factory at (800) 289-9100 or (559) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair).

All merchandise returned for credit may be subject to a 20% restocking and refurbishing charge.

Goods returned for repair or credit should be clearly identified with the assigned CA or RA number and freight should be prepaid. Ship to the appropriate address below.

If you are located within the continental U.S., Alaska, Hawaii or Puerto Rico, send goods to:

Service Department
Pelco
3500 Pelco Way
Clovis, CA 93612-5699

If you are located outside the continental U.S., Alaska, Hawaii or Puerto Rico and are instructed to return goods to the USA, you may do one of the following:

If the goods are to be sent by a COURIER SERVICE, send the goods to:

Pelco
3500 Pelco Way
Clovis, CA 93612-5699 USA

If the goods are to be sent by a FREIGHT FORWARDER, send the goods to:

Pelco c/o Expeditors
473 Eccles Avenue
South San Francisco, CA 94080 USA
Phone: 650-737-1700
Fax: 650-737-0933

REVISION HISTORY

Manual #	Date	Comments
C1554M	8/04	Original version.
C1554M-A	4/05	Revised to reflect software changes (as a result of ECO 04-0212).



Worldwide Headquarters
3500 Pelco Way
Clovis, California 93612 USA

USA & Canada
Tel: 800/289-9100
Fax: 800/289-9150

International
Tel: 1-559/292-1981
Fax: 1-559/348-1120

www.pelco.com

ISO9001

United States | Canada | United Kingdom | The Netherlands | Singapore | Spain | Scandinavia | France | Middle East